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THE TAXATION
OF
THE GROSS RECEIPTS
OF
RAILWAYS IN WISCONSIN
BY
GUY EDWARD SNIDER

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INTRODUCTION.

With the one exception of real estate, railways are the most productive source of revenue for our state and local governments. Owing to the complex organization of the industry, the problem of the method to be employed in securing this revenue has been a difficult one, resulting in the trial of many and devious methods. It was said a quarter of a century ago that "there is no method of taxation possible to be devised which is not at this time applied to railroad property in some part of this country." The two most noticeable methods employed is the ad valorem tax and the tax on earnings. Although many modifications of the tax on earnings have been tried, of these that upon gross earnings has been the most generally accepted.

The origin of this tax is difficult to trace. While it may have been suggested by the tax on gross premiums of insurance companies, it is more probably a descendant of the old tax on stage coaches in England. It was first applied to railways in the charter tax of the Illinois Central Railway, and has been in operation on that road since 1851. Suggestions for its adoption were subsequently made in other states, and in 1854 it was made the sole method of taxing railway property in Wisconsin.

Since its first employment the system has had a varied career. It was employed for a short time in Iowa, but was soon declared unconstitutional; in 1873 it was adopted in Minnesota; in 1874, in Michigan. Other states have since adopted it, some, as for instance, Vermont, putting it on the same footing as, and permitting its substitution for, the ad valorem tax. In others

the tax on gross earnings is used as a supplement to a property tax, and in still others as a method of securing revenue to pay the expenses of the State Railroad Commission.

This essay is an historical and a critical study of the tax on gross earnings as it developed in Wisconsin, with side lights from the experience of other states. To supplement and contrast with the operations of the tax on gross earnings, a chapter on the typical workings of the most prominent form of the ad valorem method is introduced.

CHAPTER I.

THE CONSTRUCTIVE PERIOD IN WISCONSIN. INTRODUCTION.

The distinctive feature of the period of construction from 1850 to 1870 was taxation for railways. Railways, the new and mighty factor in industry, must be secured at any price. The movement westward was in full swing; settlers were pouring into the state. The increase in the population from 1846 to 1850 was nearly 900 per cent.¹ The greater number of these immigrants were farmers. Already there was a surplus of agricultural products in local markets, and transportation was so difficult and expensive that often "crops were left to rot in the fields."² Cheap transportation was the one necessary factor for the development of the country.³ The merchants and manufacturers in the eastern, the farmers in the central, and the miners in the western parts of the state suffered from the lack of it. Dr. Libby has pointed out how the manufactured goods from the east, and the lead from the west drew together the interests of the two sections, and advanced the agitation for a connecting railroad.⁴

Although there was a desire to foster and encourage the construction of railroads, the state could not, without a constitutional amendment, lend its credit for internal

¹ Seventh U. S. Census.

² Wisconsin Herald, June 10, 1848.

³ Report of Committee on Land Limitations, Wisconsin Assembly 1851. Also Report of Committee on Railroads, *ibid.*, March 29, 1855.

⁴ Libby. *The Significance of the Lead and Shot Trade in Early Wisconsin History.* Wisconsin Historical Collections, Vol. VIII.

improvement. Aid, if given, must come from the local governments. The great advantage over rivals, accruing to the towns and counties which should secure railways, led to bitter struggles between communities. In fact, this rivalry was one of the greatest factors in our early railway history.⁵ At the least hope or suggestion of a railway this competition showed itself. Towns, cities and counties in their eagerness would have bills rushed through the legislature granting permission to issue bonds to aid in the construction of the railway,⁶ the bonds to be exchanged for railway stock. Even villages, hoping ultimately to pay for the bonds from the earnings of the stock, pledged their taxes for thousands of dollars. The local governments soon found themselves heavily in debt; the stock not paying immediate dividends, the interest on the bonds (and later the principal) had to be paid from the local taxes. Thus it was that the early period of construction was characterized by taxation for railways.

I. THE GENERAL PROPERTY TAX.

The Wisconsin laws relating to taxation in 1849 were either adaptations of statutes from the older states, principally New York,⁷ or new statutes created to meet new social and industrial conditions. The principal industry of the state was agriculture. Manufacturing establish-

⁵ For comments on this rivalry see B. H. Meyer's "History of Early Railroad Legislation in Wisconsin. Wisconsin Historical Collections, Vol. XIV, pp. 254 *et seq.*

⁶ B. H. Meyer in the "Early General Railway Legislation in Wisconsin, 1853-1874," has collected and analyzed the mass of acts thus passed. *Transactions of the Wisconsin Academy of Science, Arts and Letters.* Vol. XII, Part I, p. 337.

⁷ The territorial laws on taxation were copied from Michigan, but in the revision of the laws in 1849 the New York statutes were copied. *Report of Wisconsin State Tax Commission, 1898,* p. 23.

ments were few and produced (with the exception of the lead industry) for home consumption only. A simple system of taxation was adequate. The general property tax sufficed to reach all property with an appearance of equality and justice. The advent of the railway brought new industrial conditions and a new organization of property. It built cities and towns, linked East and West, factory with farm, and caused land values to increase manyfold.

The desire to encourage the construction of railways manifested itself in various ways. As an example, the first railways were exempt, during their construction, not by law, but by practice, from taxation. The pioneer tax laws were adopted for and adapted to an individual organization of property. The administration of these laws depended upon the energy of the local assessor and the ability of the County Board of Supervisors.⁸ The railways were subject to taxation under this general property tax law.

The first railway constructed in Wisconsin, The Milwaukee and Mississippi, began operations between Milwaukee and Waukesha in 1857. The same year, the Board of Supervisors of Milwaukee County, after consulting the county attorney, assessed the railway property under the general property tax law, but later the assessment was stricken from the rolls as referring to real estate insufficiently described.⁹

In 1852 the "road within the city" of Milwaukee was assessed by the city assessor at \$5,000, and a tax of \$85.05

⁸ Wisconsin administrative machinery corresponds to the general methods followed in the United States under the general property tax laws. For statistics giving organization and duties, see Revised Statutes of Wisconsin, 1849, Chapter 15.

⁹ Proceedings of the Board of Supervisors of Milwaukee County, October, 1851. Manuscripts in the vaults of the County Clerk.

collected,¹⁰ or four mills on the cost of depot and grounds, exclusive of the right of way. Other property paid sixteen mills on the dollar.¹¹ In 1853 the railway property was assessed as personal, rather than real property, under the section of the law making the personal property of a corporation taxable in the taxing unit in which its home office was located. The real property escaped taxation. The town of Wauwatosa, the only other taxing unit in Milwaukee County, through which the railway passed, first taxed the railway property in 1852. Here the real property was described by sections, rods, and acres, and the right of way, only seven miles long, was assessed in nine different sections (at so many different values per acre), valuations in adjacent sections varying as much as twelve and one half per cent. The equalized value averaged \$2,349.65 per mile, on which a tax of \$16.18 per mile of right of way was levied.¹²

There was a disagreement from the beginning in regard to taxation between the railway company and Waukesha County.¹³ The railway company neglected to pay its taxes, claiming that the assessments were disproportionate in the different towns. As a consequence, in two towns the right of way was sold for taxes.¹⁴ The Board of Supervisors realizing the inequalities of the assessments, petitioned¹⁵ the legislature and obtained a law

¹⁰ Assessment Rolls of the County of Milwaukee, 4th ward. City of Milwaukee, 1852. Manuscripts in vaults of the Treasurer of Milwaukee County.

¹¹ Determined from the Assessment Rolls of Milwaukee County, 1852, and the report of the Secretary of State, 1854. Appendix, Assembly Journal, 1855.

¹² Assessment Roll of Town 7, Range 21, Milwaukee County, 1852. Manuscripts in vaults of County Treasurer.

¹³ Waukesha Democrat, December 14, 1852.

¹⁴ Ibid.

¹⁵ Daily State Journal, Madison, January 29, 1853.

in 1853 giving them power and authority to equalize assessments on rail-and plank-roads.¹⁸

The fervent efforts to secure the railways had not led the towns to anticipate the tax problem. The description of the right of way as so many acres, the variation of the assessed value in different units, the assessment one year as real, the next as personal property, the activity of numerous local officials were all undesirable elements in the taxation system. As the possibility of a repetition of the sale of their right of way or a levy upon their rolling stock was not an attractive prospect to the railway companies, they instigated a movement to secure a change in the laws. This was no difficult matter, for those counties not having railways—and they were the great majority at this time—were willing to make any concession that might hasten or encourage railway construction. The prospect of losing the taxes from railway property which might be within their boundaries in the future was not of moment; it was their desire to encourage construction. Governor Barstow, in a message to the General Assembly in 1854 says:—

"In our youthful state, it becomes the duty of those having committed to their charge its interests, to foster by all reasonable and proper means, those undertakings which will best tend to bring into use our varied resources and to be wary of throwing impediments in the way which might deter capitalists from investing their means in such improvements as are best calculated to effect this result. Wisconsin only needs the opening of avenues of communication, to increase in population and substantial wealth, in a manner unexampled in the history of Western States—so far as the enactment of constitutional laws can relieve the different railroads from taxation during their construction, I recommend their passage, as one of the means of encouragement within your power to render."

¹⁸ Laws of Wisconsin, 1853, Chapter 66.

II. THE TAX ON GROSS EARNINGS.

It was clearly the policy of the state to encourage and foster the construction of railways; to extend such aid to them as the constitution would permit. This policy and the desire of the railway company that their property should be taxed in a class by itself led to the law of 1854.¹⁷ This was passed by the Legislature without much comment, at least on the floor, or by the newspapers, and was entitled "an act taxing rail- and plank-roads." The following are the principal sections of the act.

Section 1. Railway companies were to make an annual statement of gross receipts, before January 19th of the following year, to the State Treasurer.

Section 2. "It shall be the duty of the said railway companies and plank-road companies to pay or cause to be paid to the treasurer of the state for the use of the state, on or before the tenth of January in each year, a sum equal to one per centum of the gross earnings of their respective roads so returned, which amount of tax shall take the place and be in full of all the taxes of every name and kind upon said roads, or other property belonging to said companies, or the stock held by individuals therein, and it shall not be lawful to levy or assess thereupon any other or further assessment or tax for any purpose whatsoever; but when a railroad or plank-road lies partly within this state and partly in another state or territory the company shall pay such proportion of one per centum upon the gross earnings of the whole road so returned, as the length of that portion of the road within the state bears to the whole length of the said road."

¹⁷ It is interesting to note that a proposition was made that railways be exempt during construction, and thereafter be taxed on net income. See Resolution of January 28, 1853, Assembly Journal.

Section 3. \$10,000 was to be forfeited by railroad companies neglecting provisions of this act. Section 5 provided that when companies failed to make returns, the state treasurer was to ascertain gross earnings, levy one per cent.,¹⁸ and when taxes were not paid, to seize and sell the property after ten days' notice.¹⁹ The act went into force April 10th, 1854.

The result was to reduce the total taxes of railway corporations to less than half the tax formerly paid. Though there was little comment throughout the state by the newspapers, this omission was probably due to both ignorance of the true effect of the act, and to each paper's intense desire to get a railway through its own locality, all of which resulted in lower taxation for railways. The people of Waukesha, one of the few counties having a railway within its limits, however, appreciated the effect of the act. The newspapers of that locality reflect the bitter feeling engendered by the cutting off of an important source of revenue. One editor writes:—"The following is perhaps a fair specimen of the Wisconsin Legislature, and shows to some extent how much the Legislature was controlled by railroad and other monopolies" (quotes railroad tax laws). "Where is the farmer or mechanic who would not be glad to shell out in full for all taxes at the same rate? But if all were taxed only one per centum on their income the members of the Legislature would be minus their pay. This, of course, would not suit—the heavy per cent. must be drawn from some source, and it is invariably the case, those least able

¹⁸The bill as first introduced placed the per centum at one and one-half per cent. on gross receipts. An amendment proposing one and a half per cent. state purposes and one and a half per cent. for town and county purposes, in the towns and counties through which the road ran was lost. And the bill was finally passed, the clause being amended to one per cent.

¹⁹Laws of Wisconsin, Chapter 74.

to pay *any* have to pay the most. Wisconsin has been peculiarly cursed with a batch of biased legislation during the last session."²⁰

A convention held in Waukesha to protest against the law resolved "that we are in favor . . . of just and equal laws of taxation, placing on the same level the railroad company and the working farmer,"²¹

At the annual meeting of the Board of Supervisors of Waukesha County, in November, 1854, about seven months after the above law went into force, the committee on assessments reported that the town assessors had, regardless of the law, assessed the railway property located in their districts, and the committee asked for instructions. The Board then adopted the following resolutions :

"Whereas, a law was enacted by the Legislature of the state of Wisconsin, at its session in 1854, whereby all rail- and plank-roads in said state are relieved from other than state taxation, thus operating unequally and unjustly, and to the injury of those counties through which said roads pass; and whereas the assessors in those towns in this county, through which said roads pass, have assessed said corporations as heretofore, regardless of said law and in full belief that said act is unconstitutional, therefore, Resolved, that a committee of two be appointed by the chair to confer with E. G. Ryan, Esq., and obtain from him a written opinion as to whether said act referred to is in strict accordance with the Constitution of the State, or in direct violation thereof."²²

In compliance with this resolution, Mr. E. G. Ryan of Milwaukee, one of the able attorneys of the State, prepared an opinion for the Board, expressing his belief that the law was unconstitutional, and that the Board had

²⁰ Waukesha County Democrat, April 14th, 1854.

²¹ Waukesha County Democrat, October 11th, 1854.

²² Proceedings of Board of Supervisors in *Ibid.*, December 20, 1854.

power to assess and collect taxes on railway property within the county.²³ He said:—

“ . . . I am clearly of the opinion that the act of the last session, Chapter 74, is unconstitutional, for the following reasons:

1st. Because it assumes to tax railroad and plank-road companies by a special rule differing in rate from the general rule of taxation on other property.

2nd. Because it exempts the property of such railroad and plank-road companies from all taxation unless they are ‘earnings,’

4th. Because it exempts the property of such railroad and plank-road companies from all county, town, city and village taxes.

5th. Because even conceding the power of the Legislature to discriminate in taxation between the property of railroad and plank-road companies, and the property of other persons, it assumes to make an unequal and unjust distinction between such companies and their property and does not establish a uniform rule as to them.”

“ . . . If the act be, as I am of the opinion, unconstitutional and void, it would probably vitiate any tax levied to omit the property exempt under this act, because such omission would tend to raise other taxes.”

The Board of Supervisors, acting in accordance with this opinion, and evidently voicing popular feeling, ordered the committee on assessments for 1854 to include in the assessment rolls all railway and plank-road property²⁴ and the returns were thus made to the Secretary of State, though, contrary to the usual practice, they were not included in the total valuations but entered as separate items.²⁵ The County Board also agreed to pay all

²³ Waukesha Democrat, December 6th, 1854.

²⁴ Proceedings of the Board of Supervisors in Waukesha Democrat of December 20th, 1854.

²⁵ Assessment rolls in vaults of Secretary of State. No other county returned on assessment rolls to Secretary of State railway property for taxation.

expenses and costs that accrued to the several towns in collecting the tax on railway property.²⁶

The action of the Supervisors received the general approval of the citizens of the county. A meeting of the citizens of the town of Vernon, held to endorse the action of the county supervisors, passed a resolution instructing their representatives in the General Assembly to use all legal means to procure the repeal of the law exempting railway property from town and county taxes.²⁷ The sentiment seems to have been, not so much in opposition to the lowering of railway taxes; but to the fact that the taxes were taken away from the towns and counties and the other property had to bear the additional burden. This burden was annually increasing, as the railways added value to the district through which they passed, making property pay a relatively higher state tax than before. The people thought not of the increased value but of the increased taxes and the "railroad debt", the results of the efforts to encourage railway construction.

The railway company refused to pay the taxes levied on their real property in Waukesha county, and the county treasurer advertised the lands of the railway company for sale, to satisfy the delinquent taxes of 1854.²⁸ In February, 1855, at a special session of the Board of Supervisors, the committee appointed at the regular meeting in 1854 reported that injunctions against the collection of the taxes on railway property by the county treasurer had been issued. The committee was instructed to carry the case through the courts. Meanwhile the town treasurers, against whom no injunction had been issued, were ordered to suspend action until the decision of the

²⁶ Proceedings of Board of Supervisors. Waukesha Democrat, December 20th, 1854.

²⁷ Waukesha County Democrat, December 27th, 1854.

²⁸ Waukesha County Democrat, April, 1855.

courts was made.²⁹ However, previously to this order, the treasurer of the town of Waukesha had levied on property worth at least \$1,500 and sold it for \$500. The Board, through their counsel Mr. Ryan, moved that the injunctions be removed. The court heard the arguments and decided that the law was within the constitutional powers of the legislature and therefore valid.³⁰ The case was carried to the Supreme Court and the decision of the lower court was sustained. The question of validity had centered around the provision in the constitution that "the rule of taxation shall be uniform." Chief Justice Whiton, the author, in the constitutional convention, of the clause relating to uniformity, presided over the Supreme Court. Justice Cole, of the court, was also a member of the Constitutional Convention, and had taken an active part in the discussions on the same clause. The other member of the court was Justice A. D. Smith. The court, after due consideration, having overruled the demurrer, thereby holding the law to be constitutional and valid,³¹ Judge Hubbell was sustained in his decision that the Legislature had power to partially exempt property from taxation; that uniformity in class is what the constitution requires.³²

²⁹ Ibid, March 14, 1855.

³⁰ Am. Law Register, Volume 2, p. 616.

³¹ 52 Wisconsin 67.

³² The documents relating to the case were kept, awaiting the writing of the opinion, but this was never done, and they were subsequently lost. Only the attorney's briefs and the statements of the case are preserved.

CHAPTER II.

THE DEVELOPMENT OF THE TAX ON GROSS EARNINGS.

I. VALIDITY OF THE "TAX"—SUBSTITUTION OF A "FEE."

INTRODUCTION.

The tax on gross earnings remained in force until 1860, when a change became imperative. In 1859 the question of "uniformity in tax rates" had come before the Supreme Court in a case, in which there was a distinction made between urban and agricultural land in a taxing district. The Court held that the constitution requires an equal and uniform rate and valuation, operating alike on all taxable property throughout the state or municipality within which, or for which, the tax is to be raised; and when the legislature prescribes a different rule it is unconstitutional and void; that the constitution has fixed one unbending uniform rule of taxation for the state, and property cannot be classified and taxed as classified by different rules; that all property must be taxed uniformly or be absolutely exempt.¹

This decision raised the question of the validity of the law of 1854 taxing rail- and plank roads by a rate and rule different from the rate and rule on other property. Armed with this decision, which warranted the conclusion that the law was unconstitutional, the Winnebago Lake and Fox River Plank Road Company refused to pay taxes in 1859 and 1860. The Attorney General be-

¹ *Knowlton vs. Supervisors*, 9 Wisconsin 379. (Heard and decided in 1859.)

gan a proceeding in the Supreme Court for a writ of mandamus to compel the officers of the company to make a report and to pay their taxes. The counsel for the company contended that the law was void and they referred to the recent decision of the court to sustain their argument. The Attorney General argued that constitutionality of the law was settled by the court in the case of the Milwaukee and Mississippi Railroad Company vs. the Board of Supervisors of Waukesha County. The legislature being in session and anxiously awaiting the decision, the court made "a speedy decision—in order that the legislature might take such action as might be deemed necessary." The far-reaching effect of the decision if the law was declared unconstitutional was not brought to the court's attention.

Anticipating the decision, members of the legislature were discussing the possible change of the law. They, as well as the railway companies, recognized the necessity, due to the nature of the property, of the business, and the questions of administration arising from these peculiar relations, of putting railway property in a class by itself for the purpose of taxation. These considerations made the majority of the legislature opposed to a return to the old method of local taxation, on assessed value at a uniform rate.

The court's decision, handed down early in the January term of 1860, held that the act of 1854 was unconstitutional and void, violating section I, Article 8, of the constitution: that the "uniformity" required by the constitution means not uniformity of class but equality as to all property taxed: that the rule must be generally applicable to all property. This "does not prohibit the legislature from exempting from taxation such property as they see fit. The one per centum of gross earnings of the plank-and railroads required to be paid to the state is a tax

upon the road within the meaning of the constitution although not assessed upon the valuation of the roads. It is not a bonus for the right and privilege granted to construct and maintain the roads in this state, so the payment cannot be regarded as a sum paid for a licensee to do what might not legally be done without it, but its primary object is to raise revenue."²

The legislature, accepting the idea that they had power to exempt property from taxation, though disagreeing with the court, inferred that they had power to raise revenue by means of licenses; using both of these powers they produced the law of 1860 exempting all railway property used in the operation of the road from taxation by special assessment³ and requiring railways to obtain a license, by payment of one per centum of gross earnings, to operate in the state.⁴

As a result of the decision that the law of 1854 was unconstitutional Mr. Kneeland, a property owner in the city of Milwaukee, brought action to restrain the city of Milwaukee from issuing tax deeds for certain property that had been sold for the unpaid taxes of the years 1857, 1858, 1859, holding, that because railway property had been omitted from the assessment for said years the tax was unjust and unequal. He cited the case of Attorney General vs. Plank Road Company to show that such

² State *ex rel* Attorney General *vs.* Winnebago and Fox Lake Plankroad Company, 11 Wisconsin 35.

³ Laws of Wisconsin, Chapter 173. 1860.

⁴ Section 1. All railroads organized and operated in this State must apply to the Treasurer of the State for a license to operate their roads "and to pay such a license, to the Treasurer of the State, as a fee or a charge therefor, a sum equal to one per centum of the gross earnings of their respective roads."

Section 2. They must apply and pay for license on or before February 10th in each year, and the State Treasurer shall issue certificate that such payment has been made. Chapter 174, Laws of Wisconsin. 1860. Went into effect March 28th, 1860.

property had been illegally omitted. The Supreme Court sustained his position; declared taxes for the years 1857, 1858, and 1859 invalid because of the unjust burden imposed; reaffirmed that the law of 1854 was unconstitutional and expressed as their opinion that the law of 1860 was also invalid.⁵

The effect of the decision was startling. Taxes for the years 1854 to 1862 in every taxing unit through which the railway passed were illegal and void. The interests involved were immense; as a consequence of the decision, estates and titles would be swept away; counties and towns already heavily in debt would be financially ruined and in their ruin crush every property owner; thousands of dollars would be spent in litigation; to re-levy the taxes was impossible,—the citizen could not bear nt. It meant the destruction of public confidence, the stagnation of the state, from which it could not recover for years.

The legislature stood face to face with this problem. They appointed a joint committee to investigate and wrestle with it; and adjourned in order to give the committee time to determine some course of action. The legislature re-assembled and the committee reported that they had decided to frame a bill providing for the relevying of the taxes from 1854 to 1859, when a decision of the Supreme Court ⁶ "relieved them from the burdensome

⁵ Judge Paine says: "The principles of our decision will also invalidate the law of 1860, professing to exempt railroad property and then requiring them to pay a license. . . . I am satisfied . . . that . . . this is in substance the same thing as the law of 1854 under a different name. . . . We cannot adhere to our decision in *Attorney General vs. Plankroad Company* and sustain the legislation of 1860, unless we are prepared to say that the legislature may do indirectly what it can't do directly, that it may by merely calling things by wrong names, sustain the most palpable evasion of a constitutional provision." 11 Wisconsin 517. Decision in January term, 1862.

⁶ Handed down June 2, 1862.

duty."⁷ The Supreme Court on seeing the far-reaching results that would follow from their decision were induced to give the case a new hearing and overrule their first decision upon the ground of *stare decisis*. They, however, avowed their continued belief as to the unconstitutionality of the law and advised the legislature to change it.⁸

II. THE INCREASE IN THE RATE.

For several years the local taxing units through which the railways passed had felt the increasing burden of taxation, principally upon real estate, and had thought it unjust that the railway companies should escape with so light a tax. The feeling of discontent grew; from time to time petitions were sent to the Legislature asking for relief, especially urging that railway property be assessed and taxed in the same manner as other property. In 1859, the general tax laws were revised and modified, and a new law was passed making property returnable under oath.⁹ The result was an increase of personalty returned from \$98,702,213 in 1857 to \$168,620,233 in 1858. This brought additional pressure on the tax-payers, and their desire to lessen their proportion of the burden of taxation by an increase in the rate of taxation on railways was strengthened.

The fraud and mismanagement practiced by the railway companies during their construction created a popular feeling against them, especially in those localities where the debt created to assist in their construction was pressing heavily on the property owners. The farmers also had another grievance; they had mortgaged their lands for railway stock and now the eastern capitalists,

⁷ Wisconsin Assembly Journal, 1862, p. 1159.

⁸ 115 Wisconsin 515.

⁹ Chapter 115, Laws of Wisconsin, 1858.

who had purchased the mortgages, were foreclosing. Governor Randall estimated that at least \$5,000,000 of these mortgages were given on land worth \$15,000,000. They were "conceived in fraud, created in fraud, and sold and transferred in fraud."¹⁰ Between five and six thousand men were involved. The laws of 1860¹¹ did not satisfy the antagonism to the railways, and it continued to gain in strength.

The Civil War greatly increased the expenses of the state government and the rate of taxation rose rapidly. The one per cent. tax paid by the railway companies was especially obnoxious and the people urged that it should be increased. There were patriotic men in the railway as well as in other business and they also believed that the per cent. should be raised. The feeling is reflected by Mr. L. H. Meyer, President of the Milwaukee and Prairie du Chien Railway Company in the annual report for 1861. He says:—"Under existing laws, railroads are taxed one per cent. on their gross earnings, payable to the state, in lieu of local taxation and in consideration of a yearly license from the state. . . . The tax is moderate, the inducement to make it so has been the depressed and unprofitable condition of railroad property in the state. Good crops and a revival of business have not been without beneficial effects on railroads, and it is no more than right, that as the class of property recovers from its prostration it should bear a greater share of the tax than the present law puts upon it. The only question will be as to the amount levied."¹²

¹⁰ Annual message, 1861, p. 11.

¹¹ The per cent. was not increased, as there was no need of increased revenues. Governor Randall says in his annual message in 1860 that the State was free from debt.

¹² Annual Report of the Milwaukee and Prairie du Chien Railroad Company for 1860.

The popular feeling came to a head in 1862. Petitions poured into the Legislature; Governor Harvey in his Annual Message said:

"It is plainly apparent, moreover, that the provision which exempts railroads and their property from taxation by the payment of one per centum of their gross earnings is grossly unequal. There are in operation in this state eight hundred and sixty-three and one-fourth miles of railroad, worth certainly an average of \$15,000 per mile. As before stated in amount of receipts of General Fund, this property paid into the state treasury the past year \$25,056.29, in lieu of all taxation. The total earnings returned were \$2,991.558.86 showing \$4,859.28 of license or tax moneys remaining unpaid. The title of these roads has passed or is rapidly passing into the hands of the first creditors at a cost which leaves them among the most productive property in the State. There is no longer justice or good policy in favoring this property in taxation, at the charge of the other property of the state. At the same time the theory of the law seems to me correct. It would not be good policy to expose the roads to taxation by piecemeal in every town or school district through which the track happens to pass. Then, the unequal productiveness of the different lines indicates a percentage upon the earnings to be the most equitable basis."¹⁸

The Legislature during the extra session in 1862 made appropriations that increased the tax rate on assessed property fifty per cent. The regular session responded to the popular demand and increased the railway rate from 1 to 3 % on gross earnings.

In 1870, railway construction reviving, the companies again sought and received aid from towns, villages, cities, and counties. Many localities were already keenly suffering from the burdens of a heavy bonded debt, the result of giving such aid. In the light of this experience

¹⁸ Governor's Annual Message, 1862.

many persons proposed schemes to ameliorate the condition of any municipality giving aid in the future.

The result was an act which, while authorizing a municipality, on vote of electors, to issue bonds for railway stock, not to exceed \$5,000 per mile, provided that the holder of the bonds, in order to secure the benefits of the act must register them in the office of the Secretary of State; and that the railway companies accepting the bonds under provisions of the act must pay six per cent. of their gross earnings into the State Treasury, to be placed to the credit of the towns issuing bonds. If this sum were not sufficient to pay the interest on the bonds, a special tax, added to the state tax, was to make up the deficiency. The peculiar feature of the law was the attempt to tax the "unearned increment" of land. The act provided that each town, incorporated village or city, issuing bonds under the act was to make a return to the Secretary of State of the annual assessed valuation of real property for 1869. The amount yielded each year by the state, county and city or town on the increase of assessed valuation over the assessed valuation of 1869 was to be placed to the credit of the said municipalities to form a sinking fund for payment of interest and principal of bonded debt. The state was not a party to the transaction but merely the custodian of the funds.¹⁴ The rate in 1875 was reduced from six per cent. to five per cent. of gross earnings, and the clause authorizing the special tax being a complete failure, was struck out. The law, though remaining on the statute books, did not bring about the desired results; for special legislation continued, and in 1872 another general law¹⁵ was enacted authorizing localities to give aid without complying with the involved scheme of the previous law. The law of 1870 remained

¹⁴ Chapter Laws of Wisconsin in 1870.

¹⁵ Chapter 182, 1872.

in force until it was repealed by omission from the revised statutes in 1878. Only two railway companies, the Green Bay and Minnesota, and the Northern Wisconsin, and four towns, accepted its provisions. The law was poorly administered. Through the carelessness of executive officers, the railways paid three instead of five per cent. on gross earnings,¹⁶ and the Northern Wisconsin paid nothing in 1876, 1877, and 1878. The transfer of moneys from the general fund to the credit of the towns was often neglected.

The exemption of the lands of railway companies from taxation should be mentioned. Neither the charters nor the early laws exempted lands, other than those necessary for the operation of the railway, from taxation; but, in 1864, the lands of the West Wisconsin Railway were made exempt for a period of ten years,¹⁷ and in 1870 the time was further extended ten years.¹⁸ A new policy being started, other railways receiving government lands sought exemption. An alternative was sometimes offered, and those whose lands received from government were not exempt from tax, were exempt from payment of fees for a period of five years.¹⁹ To equalize the burden, where railway lands were exempt, it was provided that the company should pay a license fee of five per cent. on gross earnings and that this tax should be divided among the counties, according to the number of acres exempt.²⁰ The Northern Wisconsin Railway Company, for exemption from taxation, was obliged to sell its lands to actual settlers, for not more than \$2.50 per acre; and to carry free of charge, for a period of thirty years, all troops and property of the state.²¹

¹⁶ Report of Green Bay and Minn. Ry. Co., 1874, p. 76.

¹⁷ Chapter 324, General Laws, 1864.

¹⁸ Ibid, Chapter 104, 1870.

¹⁹ Chapter 113, General Laws, 1875.

²⁰ Ibid, Chapter 22, 1879.

²¹ Chapter 22, General Laws, 1879.

Various other measures were passed to encourage railway construction. In 1875 the Wisconsin Valley Company was exempted from payment of license fee for a period of three years.²² In the same year an act, passed to encourage the building of narrow gauge railroads, authorized towns to issue bonds; and to secure for a period of ten years the license tax paid by the railway company in whose aid bonds were issued.²³

The railways, heavily in debt, depended upon the crops for their revenues. Prices having been high during the war, the farmer could pay a high price for transportation; but with the extended production, due in part to the railways, the price of grain fell, and the farmers could no longer afford to pay the transportation charges at the same figure. The railways, on the other hand, could not pay their debts if rates were lowered. As the farmer, having his capital fixed in land, was at the mercy of the railway, exorbitant rates were charged, which naturally resulted in hostility between farmer and railway.

Bankruptcy and ruin from injudicious investments in railway stock added hundreds of farmers to the disaffected classes; municipalities, having loaned their credit, expecting to pay their debts from the railway dividends, and to reap great wealth and advantage, found instead that they were buried beneath a hopeless debt, and promptly arrayed themselves against the railways. In addition to all these grievances, discrimination in rates worked an injustice to the people at large. Discrimination vitally affected values in farms. It was fatal to the merchant in the non-competitive place. It blasted the hopes of the village, and built up cities at competitive points. It made or unmade a business by offering favorable or unfavorable rates. Thus it was that the farmer,

²² *Ibid.*, Chapter 278, 1875.

²³ *Ibid.*, Chapter 117, 1875.

the villager, the merchant, and the manufacturer were up in arms against the railway corporation.

In the Grange, a farmers' society, the movement found an organ for expression, though it by no means included all the active forces. The movement for railway regulation had early beginnings, but it was fanned into flame about 1872. Governor Washburn, in his annual message for that year, calls attention to the discrimination in rates and to the power assumed by the railway officials, who thought their will supreme law, an error which, he says, should be corrected. In 1873, he says that the vast corporations are becoming a source for alarm; that there is no branch of industry within the state that is not dependent on the railway companies. The financial disturbance of 1873 added fuel to the fire. The popular movement took several directions, advocating abolition of discrimination; regulation of rates; changes in the patent laws; banking laws; a currency law; alien laws; internal improvements and taxation. The financial distress touched the pocket of the people and there came a "demand for a purer public morality, a more equitable apportionment of the burdens and blessings of government and a more rigid economy in the administration of public affairs."²⁴

The Secretary of State, in 1874, discussing the question of taxation of railways, accepts as the theory of taxation that all property should be taxed on selling value and declares that there are three methods of determining the value of railways for the purpose of taxation;—I. Actual cost of roads and equipments; II. Total indebtedness and market value of the stocks; III. Capitalization of net earnings. I. By the first method, he levied on the cost of the roads and equipment as returned by roads at

²⁴ Governor's Message, 1874.

\$61,459,371.81, a rate of 2.23 %, the same as the rate on other property, which yielded \$1,370,544.06, or over five times \$35,566.36, the amount actually received. II. By the second method, the indebtedness being \$36,610,352.80 and forty per cent. of the face value of stocks being \$14,229,916.83, the amount due at 2.23% was \$1,113,738 or thirteen per cent. of gross earnings. III. Capitalizing at seven per cent. the total net earnings in Wisconsin, he reached a result of \$3,830,128.47, and again, applying the prevailing rate, he found the amount yielded to be \$1,220,169.50, or 14.20 % of gross earnings. An average of the three methods, says the Secretary, gives 11.79 % of gross earnings. While the Secretary's assumption that other property was assessed on its selling value, and his use of unreliable statistics and questionable methods of determining value may be criticized, nevertheless, his figures, showing that railways did not bear their full share of burdens, had an immense influence, and made some change in the rate imperative.

During the session of 1874, while the question was before the Legislature, a committee was appointed to consider the advisability of a change. The majority of the committee found that the burdens of other tax payers were relatively heavier than those paid by the railway companies; and advised that the rate be raised from three per cent. to five per cent. of gross earnings. They, as well as the railway companies, favored the retention of the license fee system. The minority report of the committee desired the abolition of the tax on earnings and advocated that they be taxed the same as other property. They urged the unconstitutionality of the law; the lack of interest by railways in expenditure; the inequality of the method as objections to the tax on gross earnings.²⁵

* Comm. Tariff and Taxation of Railways, 1874.

The Grange had called for an increase and change in the method of railway taxation. It was the equality of burdens, not of form, that they demanded. The railways opposed any change of form, claiming that the true measure of value was the gross earnings. They argued that it was unwise to tax them at the same rate as other property, for they were a quasi-public corporation, and the rate assessed would merely be added to the charges for service; that other property paid only one per cent., not two per cent., on actual value and that three per cent. on earnings was equal to one per cent. on actual value of railway property; also that the rate in Wisconsin was higher than in any State.²⁶ The result of the Grange movement in regard to taxation was a law raising the rate from three to four per cent. on gross earnings.²⁷ Another act (the Potter law) classified the railway companies according to earnings per mile and fixed the maximum traffic charges for each class. As a result, the low rates established, being based on charges from competitive points, which paid only operating expenses and left nothing with which to pay fixed charges, forced many roads into the hands of receivers; only four paid interest on their bonds; construction came to a standstill; development of the state stopped.²⁸ The reaction which was sure to follow such an extreme measure as the Potter law, brought with it a reduction in the rate, through the classification of railways, for purposes of taxation, on the same basis as the classification for tariff charges.²⁹ This

²⁶ Mr. Corey, of Milwaukee, before Legislature, March 29th, 1874.

²⁷ Chapter 315, Laws of Wisconsin, 1874.

²⁸ Governor's Message, 1876.

²⁹ Chapter 97, Laws of Wisconsin, 1876. "1st. Four per cent. per annum of their gross earnings of all companies whose gross earnings equal or exceed three thousand dollars (\$3,000) per mile per annum of operated railways.

"2nd. Five dollars per mile per annum of operated railways by all companies whose gross earnings exceed \$1500 per mile per annum,

law remained in force until 1897 when a new classification was made. The details and workings of this classification will be discussed in a later chapter.⁸⁰ The laws providing for the exemption of the railways from all taxes except special assessments and for the payment of a license fee continued in force until 1903 when as a result of a movement for an increase in the amount of taxes paid by the railways the license fee was abandoned for an *ad valorem* tax.⁸¹

and are less than \$3000 per mile per annum, and, in addition, two per cent. of their gross earnings in excess of \$1500 per mile per annum.

"3rd. Five dollars per mile of operated railway, by all companies whose gross earnings do not exceed \$1500 per mile per annum."

Section 3. All licenses issueable in and for the year 1876 shall be granted upon reports made for the business of the preceding year and at the rates prescribed in this act.

⁸⁰ See *infra*, Chapter IV.

⁸¹ For a discussion of this movement, see *infra*, Chapter VII.

CHAPTER III.

THE ADMINISTRATION OF THE LAW.

INTRODUCTION.

A revenue law, to produce the best results, must be not only sound in principle, but it must provide for an effective administration. For while the law may be perfect if it could be perfectly administered, lax execution may render it worse than useless. Its partial enforcement may work greater injustice than the rigid enforcement of a law which is defective, from an economic point of view. Thus the provisions for the administration of a revenue law are as important as is the construction of the law on sound economic principles, since the effectiveness of the latter depends upon the efficiency of the former. The execution of the law depends upon two factors, the machinery of operation and the men who operate the machinery. The machinery for the operation of the tax on gross earnings is simple and is said to be inexpensive. With few exceptions the men who have operated the machinery can be likewise described.

I. THE ADMINISTRATIVE MACHINERY AND PROCESS.

The Wisconsin system of taxing railway companies had no elaborate administrative organization for its operation. The machinery for the assessment and collection of the license fee was simple and inexpensive. Every company or person owning or controlling a railway, in the state, was obliged to apply to the State Treasurer, for

a license to operate such railway. The application had to be accompanied by a sworn statement, showing the amount of gross earnings for the preceding calendar year, the number of miles of railway operated, and the gross earnings per mile.¹ A similar report was made to the Railway Commissioner. The only tax was the so-called "fee" charged for the license, railways being exempt from all other taxes. The "fee" was a certain percentage of the gross earnings of the railway, the rate varying according to the class under which the railway fell; the classification being determined by the amount of gross receipts per mile.²

Before 1889, the State Treasurer was the sole executor of the "license fee" law. With little or no knowledge of railway accounts and accounting, he was an incompetent administrator. Not only was he incompetent, but he had inadequate facilities at his command. Not the least of these was the insufficient detail in reports made to him. Attention was repeatedly called to these conditions³ until in 1889 the authority to compute the fee was taken out of his hands,⁴ and his function limited to issuing the license to the railway company on the payment of one-half the license fee, the amount of the fee having been determined by the proper official.

On the railway commissioner, who was familiar with railway accounts and accounting, naturally fell then the duty of computing the tax. He examined and approved the detailed reports showing receipts from all the various sources, which the railways were required to make to

¹ Revised Statutes, 1898, Sec. 1211.

² For the classification, see *infra*, Chapter IV.

In case of roads of the fifth class, the fee is a specific tax per mile, and in the fourth the fee is a specific tax plus a percentage tax.

³ Report of Ry. Com., 1881, p. 39. *Ibid.*, 1886, p. 14. *Ibid.*, 1888, p. 14.

⁴ Laws of Wisconsin, 1899, Chapter 308.

him. These reports were much fuller than those made to the Treasurer, and might be made to include whatever the commissioner desired. As a rule, they included gross receipts from freight, passenger, mails, express, baggage and storage, stock yards, elevators, store-houses, switching, car-mileage, rentals, dividends, interest from bonds, stocks or deposits; net receipts from the land department, miscellaneous income and "other items." The railroad commissioner computed the "license fee" from the reports of the amounts of gross earnings, and certified to the State Treasurer the amount of tax due from each company.⁵ The efficiency of the law, then, depended upon the correct estimation of gross receipts and the proper classification of the railways.

The Commissioner was supposed to verify the amount of gross receipts as reported to him by the railways, and also to determine the class into which a given railway fell.⁶ Previous to his participation in the administration of the "license fee" law the Railroad Commissioner had authority to administer oaths, summon witnesses and to investigate the books and papers of any person or company operating a railway in the state.⁷ He still retains these powers and would in any given case be able to fully investigate the reports. It is, however, practically impossible for him to make any extended investigations owing to the amount of work involved, and the lack of money available for such a purpose. Before the "license fee" law was supplanted by the *ad valorem* system, the Commissioner had never gone back of the certified reports of the railway companies.⁸ He had, however,

⁵ Laws of Wisconsin, 1899, Chapter 308.

⁶ See *infra*, p. 52.

⁷ Laws of Wisconsin, 1876, Chapter 57.

⁸ Extract from letter of Railroad Commissioner G. L. Rice, dated February 5th, 1902: "The approval of the figures or statements of railway companies does not prevent the commissioner from going

exercised his authority by deciding what items should be included in gross receipts, and had thus indirectly raised the amount of the license fee. As the Railroad Commissioner's approval of the returns was necessary before a license could be issued, he could, if he so desired, withhold his approval until the returns were satisfactory.

That the law gives the Commissioner extensive powers he seldom exercises, is an example of the fact that a law may be apparently faultless, but when placed in the hands of men for execution, it may prove deficient. Under existing circumstances it is practically impossible for the railway commissioner to ascertain whether the reports of earnings are correct, especially in the case of earnings from inter-state traffic. In the case of a single railway, it might be possible to corroborate by investigation the returns of the railway company, but with forty companies making reports, it is virtually impossible to accomplish this, even with a large increase in the clerical force and appropriations for the office of the railway commissioner. It should be borne in mind that, although the commissioner possesses powers amply sufficient to enable him to verify the reports of the railway companies, investigation is the only means at his command. The reports of the railway companies, made to the railway commissioner of Wisconsin, and, to the commissioners of most of the other states, as well as those made to the Inter-State Commerce Commission, are for the fiscal year ending June 30th; while the reports made for the purpose of taxation in Wisconsin are for the calendar year. Moreover, the division of earnings among the states in their

further into the amounts, and if amounts are found incorrect he may change the license according to facts. We have never raised or lowered the returns after such returns have been verified by the officers of the railroad company." As to the extent of the commissioner's power, Governor La Follette seems to differ from the commissioner. See *infra*, p. 30.

reports for the fiscal year is made on a different basis from that used in determining gross receipts for the purpose of taxation. Thus in reports to the Railroad Commissioner total gross receipts are divided by the railway companies among the states according to revenue train mileage; while for the purpose of taxation in Wisconsin the local earnings were determined and to these was added the proportion of inter-state receipts accruing to Wisconsin.⁹

The fact that the commissioner exercised no large powers in computing this tax, owing to the lack of funds, time, office force and desire, made the state dependent upon the correctness of the railway companies' reports. Governor La Follette in regard to this point said:

"The strong objection to a license fee is that it allows the corporation to make its own report of its gross earnings, or in other words to assess itself. It is just to note in this connection that . . . the railway companies have been fairer than the average individuals, who, as to the great mass of personal property, assess themselves; . . . In no case, however, should the assessment be left to the tax payer, whether corporation or individual, without some check or safeguard for the state.¹⁰

Furthermore the Governor recommended that, if the system be retained, the legislature should vest in the tax commission, or some representative of the state, the authority to increase the amount of gross earnings reported by any railway company to such a sum as would in the judgment of the authority in whom the power is vested, render the amount just and equitable.¹¹ He ad-

⁹ For the way in which the earnings from interstate traffic are divided, see *infra*, p. 41, *et seq.*

¹⁰ Inaugural Message of Governor Robert La Follette, 1901, p. 14.

¹¹ The Governor, it would seem, does not understand the present power of the Commissioner or the Railroad Commissioner is mistaken as to the extent of his power. There has been no court decision on this point.

vised that any railway company feeling aggrieved by the sum so fixed be permitted to produce witnesses and evidence in its behalf, and that "the final determination of the Commission or Board should in some form be subject to the supervision of the courts."¹²

The correctness of the reports of the railway companies has in the past been questioned. Committees have, at various times, been appointed by the Legislature to investigate these reports.¹³ In 1893, a committee reported that the returns to Wisconsin of the Chicago, Milwaukee, and St. Paul Railroad for the years 1883-1892 showed gross earnings to be \$240,054,440.74; to other states the same item was reported as \$262,471,859.90, a difference of \$22,363,411.16; the reports of the Chicago and Northwestern Company showed a similar difference of \$51,463,326.11. The majority of the Committee said that the railway companies satisfactorily explained the difference. The railways claimed that the difference was due to the fact that in some states the reports of earnings were in proportion to mileage, but in Wisconsin the actual earnings were reported. "The Committee took shipments between Wisconsin and other states and ascertained that this was true. The minority reported that certain railway companies were, to a greater or less extent, trying to evade taxation; that the Wisconsin Central Railway had escaped its just share of taxes by building, in 1881, spurs and side tracks in order to increase the mileage to such an amount that the earnings per mile would fall below \$3,000, and thus had paid as a "license fee" only \$17,681.63, whereas \$62,444.23 should have been

¹² Governor La Follette's Inaugural Message, 1901, p. 14.

¹³ Report of committee on tariff and taxation of railroads, 1874. Append. Ass. Jour., 1874.

paid.¹⁴ In 1889 a committee of the legislature appointed to investigate the returns of the railways found them to be correct. In 1903, the legislature authorized another investigation. Several expert accountants were employed for about two years in examining the books of the railway companies, and found that the receipts from 1897 to 1903 not reported for taxation amounted to \$10,500,000. The collection of the fee in Wisconsin is simple and inexpensive. One-half of the fee must be paid to the State Treasurer before he can issue a license, and the remaining half on or before the tenth day of August. A license for each year is required and neglect to obtain it or failure to pay the fee or any part of it invokes a penalty of \$10,000 and forfeiture of all rights, privileges and franchises. The collection of the "fee" has never been contested on the grounds of its being a regulation of interstate commerce. The railway companies have in the past been contented with the existing system of taxation. The tax commissioners express themselves as believing the law valid, but do not discuss the question in detail.¹⁵

The various decisions of the United States Supreme Court bearing upon the validity of the railway gross receipts tax have been analyzed by Professor Frank J. Goodnow.¹⁷ Among other principles which he points out, two are applicable to the Wisconsin law. From the decisions it would seem that a state may impose a tax upon the franchise of a domestic corporation, measuring the tax by the gross receipts, whether such receipts are derived from interstate commerce or not.¹⁸ But a state

¹⁴ Report of special committee. Assembly Journal, Wisconsin, 1893.

¹⁵ Report 1901, p. 90.

¹⁶ Prof. Frank J. Goodnow, "Taxation of Railway Gross Receipts," Political Science Quarterly, IX, p. 233.

¹⁷ *Ibid.*, p. 240.

can tax a foreign corporation only on its property in the state and on business done in the state, and a tax on that part of the gross receipts derived from interstate commerce would be regulation of interstate commerce and therefore invalid.¹⁹

II. ADMINISTRATIVE PROBLEMS.

The consequence of the simple and inexpensive machinery outlined above is to be seen in the varied interpretations of the law in Wisconsin and Michigan. As the tax was levied on gross receipts in Wisconsin, and gross income in Michigan, and the class and rate depended upon the "earnings" per mile of road, particular importance attached to the definition and interpretation of the term road or mileage, and the definition and methods used for the determination of gross income or receipts. The terms of the laws were general. The interpretation of them rested upon the official who computed the tax, but it was for the most part left to the railway officials to interpret as they thought best. There have been but few vigorous state officials who have acted independently.

I. *The Determination of Mileage.*

The definition of what constitutes road or mileage is of considerable importance and the law is indefinite²⁰ in its statements, and leaves many points undetermined. The mileage reported and used in computing the tax affects the revenue of the state in two ways. First, it is used in some instances in estimating the proportion of gross earnings from interstate commerce to be credited

¹⁹ For further discussion of validity of railway gross receipts tax, see publications of American Economic Association, III Series, No. I, p. 245.

²⁰ This is also true where the *ad valorem* system is in force, in which case mileage is used to localize values.

to the state. Second, in both Wisconsin and Michigan, the tax is progressive, the railways being divided into classes according to the amount of gross income per mile, the rate depending upon the class. Hence, the mileage is one factor in determining into which class a given railway falls, the gross earnings being divided by the length of road "actually operated."

The use of mileage in connection with the localization of earnings from interstate commerce is best considered in connection with the determination of gross receipts, as the mileage used may be in different cases track, traffic, or train revenue mileage.

The mileage questions for present considerations are first, what constitutes "road actually operated"; that is, the standard prescribed by law in both Wisconsin and Michigan for determining classification; and second, to whom shall mileage be credited.

The question as to what constitutes mileage first came up in Wisconsin when the minority report in 1881 of a committee of the legislature appointed to investigate railway conditions, stated that spurs and side tracks were built to reduce earnings per mile. No action was taken at that time to decide what constitutes road actually operated. According to the railway commissioner, as a consequence of the indefiniteness with which the term "road" is used in the law, a means of evading a part of the tax has certainly been open. He says:—"The legislature ought without delay to distinctly specify what shall constitute *road*, which may be counted in working up its mileage. It is unreasonable to allow a railroad company to count, as so much road, short spurs and sidings, built to mills, manufacturing establishments, mines and quarries, and which are only operated as sidings for gathering up freight,—have no schedule time for their operation, and which are built in the most flimsy and

temporary manner. That such tracks should be counted as mileage, and a sufficient amount of it be grouped together to change the class, and thus defraud the state treasury is clearly unreasonable, and manifestly unjust. It would seem impossible that such would be the intention of the legislature. But whatever the intention may be, the law should be so clearly defined that neither the commissioner nor the treasurer need to invoke the decisions of the court in determining the fact.”²¹

In Michigan the problem of spurs and side-tracks provoked no discussion until very recent years, the railways having reported whatever they desired. However, in 1898, the Railroad Commissioner becoming interested in his duties decided that road actually operated consisted of “main track mileage upon which there is a service to the public generally at regular and stated periods, or a continuous service for a specific purpose.” The Commissioner says:—“Taking up each spur or branch by itself the department has undertaken to decide whether the same constituted a portion of the railroad actually operated, and if it did not, the mileage of the company has been lessened to the extent of the mileage of the spur or branch. The general rule has been applied, but each case has been decided by itself, and upon the facts surrounding it.”²² As a consequence of this activity there was a reduction of 367.58 miles in Michigan railway mileage, so far as mileage reported “actually operated” was concerned. Additional revenue secured by the State by reason of this reduction by the department was \$14,351.50.

In 1889 the commissioner seems to have changed his standard for computing mileage actually operated, as he

²¹ Report of Railroad Commissioner, Wisconsin, 1888, p. 15.

²² Report Railroad Commissioner, 1898, p. VII.

says that "credit in mileage is given for all lines and parts of lines whose operation results in independent earnings and contributes to the sum of earnings upon which the taxes are computed."²³

On account of the complications due to consolidations, trackage rights, terminal agreements, etc., the problem of the source to which mileage shall be credited has presented several phases. One phase of the question has been decided in Wisconsin by the courts.

In 1880 the Chicago, Milwaukee, and St. Paul Railway Company, having gained control of four hitherto independent railways, one under a lease and the other three by deed of conveyance, reported the same separately and independent of the main system. Included as part of the system their gross earnings per mile placed them in a higher class than they occupied as independent roads. The state treasurer refused to issue a license, and in a mandamus proceeding, the court held that the license is a license to operate, the amount of fee being determined by the gross earnings within the state accruing to the corporation, and is not fixed by the gross earnings of the separate roads which that corporation may operate. In determining the class into which the roads operated by one corporation fall, the mileage of all the roads is also taken in the aggregate.²⁴

In Michigan the same question took a little different form. The Detroit, Grand Rapids, and Western Railway Company, and the Chicago and Western Michigan Railway Company, both ran trains over and reported in their mileage the same twenty miles of road. The commissioner objected to the use of these twenty miles by both railways to reduce gross earnings per mile. He

²³ *Ibid.*, 1899, p. X.

²⁴ *State ex rel C. M. & St. P. Ry. vs. McFetridge*. State Treasurer, 56 Wisconsin 256.

held that only the company having the actual management of operation, despatching trains, maintaining road, etc., could report mileage used as "road actually operated."²⁵ The courts sustained the commissioner on the ground that "mileage which is not owned by a railroad company must be exclusively operated by it in order to be used in fixing rates."²⁶

2. *The Determination of Gross Earnings.*

Of all the administrative problems connected with the taxation of gross earnings, the most important is the determination of the amount of gross earnings for a given corporation. This has involved the questions of what constitutes gross earnings, and what method shall be used to distribute to a state the gross earnings of inter-state roads.

The assumption has been that gross receipts was an item in railway accounts which could not be misunderstood or manipulated. The indefiniteness of the law has been the consequence of this. In one state we find the legal term used, gross receipts, in another, gross income.

When the tax on gross earnings was adopted, the income from sources other than operation was of little importance, and the complications of inter-state commerce of small consequence. As the industry developed and consolidations followed, railway systems operating through several states grew up and the necessity of localizing earnings became evident. With the development of the industry, income became more heterogenous. Financial policy led to surplus or large profit and loss accounts; contingencies of traffic led to ownership of stocks and bonds in other companies; and other influences gave a wide scope to the investments of the railway's surplus,

²⁵ Mich. R. R. Com., 1898, p. VII.

²⁶ Quoted by R. R. Com., 1899, p. XIII.

until at present the income from other sources than operation forms an important item in railway finance.

During the constructive period railway accounting was in a chaotic state, but through the efforts of Prof. Henry C. Adams, Statistician of the Interstate Commission, assisted by the "Association of American Railway Accounting Officers," and the "National Association of Railway Commissioners," the official reports now begin to approach uniformity in form, if not in fact. The form followed is that found in the official classification issued by the Interstate Commerce Commission.

These growing complications of the industry and the customs followed in accounting have led to complication in determining and localizing gross earnings. In fact, the practice of making up state reports in accordance with the official classification has been quite unsatisfactory where such returns have been used for determining the amount of taxable gross earnings. For example, the official classification calls, not for total gross receipts, but for net receipts or the balance from "switching charges," "car per diem and mileage," and "price of equipment." After discovering that the railways were reporting net and not gross earnings the Michigan Railway Commissioner insisted that switching and similar receipts appear in the reports as gross receipts without reductions. The railways did not yield to this ruling without protest, claiming that they paid out as much for switching as they received. The court held that "income from all sources, whether in the nature of earnings or not constitutes a part of gross taxable earnings of a railway under the provisions of the present tax law."²⁷

The investigation made by the Michigan Commission in 1898 showed that in computing the taxes against the

²⁷ Quoted in Mich. R. R. Com. Report, 1898, p. XXXIV.

railway companies "the former commissioners of railways have excluded from the gross taxable income of the companies amounts received from interest on bonds, stock in other companies, and from all other sources." ²⁸ This commissioner demanded that these be included in reports as part of gross income, in which contention he was again sustained by the courts.

In 1899 the commissioner included income from car ferries, from rentals of buildings, from warehouses, elevators, stone quarries, mines and all other sources. Gross earnings were defined as total receipts, with no deductions, except perhaps receipts from the sale of bonds and new capital. The commissioner carried this so far as to think seriously of taxing the sums received from the Grand Trunk by its leased lines, to make up deficits in operation. These, however, were omitted, on the advice of the Attorney General to the effect that "these sums were considered as loans made to the Michigan lines and could be in no sense considered as taxable income." ²⁹

This commissioner was the most energetic and efficient in Michigan's history. His zeal extended too far again, however, when he wished to assess the undivided profits of a subsidiary line as income of the proprietary line, on the ground that they could have the income at any time they desired. The Attorney General advised against this action, as the income had already been taxed. The Commissioner, in the light of his experience, decided that "it would be wise on the part of the Legislature to further particularize and declare just what is defined and incorporated by the term gross earnings." ³⁰

In Wisconsin, also, the Commissioner and the railways disagreed on what constitutes gross receipts. The Com-

²⁸ Michigan R. R. Com. Report, 1898, p. XXXIV.

²⁹ Mich. R. R. Com. Report, 1899, p. X.

³⁰ Mich. R. R. Com., 1899, p. X.

missioner says:—“The railroad companies generally insist that they pay out more than they receive for car mileage and switching. Hence, there are no receipts from these sources. They claim that rentals received from tracks, yards and terminals is double taxation, as the companies renting pay on the gross earnings; that the earnings of the money in other items is not derived from the operation of the railway,”⁸¹ and should not be included in gross receipts.

There is some truth in the claim that double taxation may arise from the taxation of rentals received from tracks, yards and terminals; and the contention that receipts from investments are not property subject to taxation, as a part of gross earnings, is sanctioned by eminent authority.⁸² Yet the Railroad Commissioner acted wisely when he “insisted that these items of gross receipts be reported as taxable property,”⁸³ and though the revenues from these sources may be of comparatively little importance, under existing conditions in railway accounting, it is of the greatest importance that there be no loop hole which would permit any looseness in the interpretation of gross receipts.⁸⁴ The efficacy of the system of taxation which uses gross receipts as the basis for the tax depends, under existing conditions, upon the defining gross receipts as meaning total gross receipts. Otherwise the system would be open to one of the objections to the tax on net receipts, viz.: that it affords and offers opportunity for manipulating the accounts. It is thought that the gross receipts cannot be juggled, or at least so easily manipulated as can net receipts. The

⁸¹ Report of State Railroad Commissioner, Wisconsin, 1900, p. 33.

⁸² See Adams, Finance, p. 461.

⁸³ Report of Railroad Commissioner, Wisconsin, 1900, p. 33.

⁸⁴ For discussion of meaning of gross earnings, see Seligman's Essays on Taxation, pp. 200, 201. Adams' Finance, p. 358, *et seq.*

Commissioner in his interpretation follows the economic definition, "Gross receipts consist of all earnings from transportation of freight and passengers, receipts from bonds and stocks owned, rents of property, and all miscellaneous receipts from auxiliary business enterprises or otherwise."³⁵

3. *Localization of Earnings.*

The localization of earnings, that is, the determination of the proportion of the gross income of an interstate railway to be credited to a given state has been a difficult problem wherever the gross receipts system has been in operation. In Michigan the methods used to bring about this distribution during the thirty years in which the system has been in force, have varied widely. During the first decade the interpretation of the law seems to have been left entirely in the hands of the railway officials. In Wisconsin similar conditions prevailed.

The Wisconsin laws of 1854 contained a rule for the localization of gross earnings, providing that interstate railways should pay "such portion of one per centum upon gross earnings of the whole road so returned as the length of that portion of the whole road bears to the whole length of said road."³⁶ Thus road mileage became the standard to be used in localizing the earnings. The law of 1860 was largely copied from the law of 1854, but this section was omitted, and the law explicitly stated in regard to their right to operate in Wisconsin that the railroads pay "as a fee or charge therefor a sum equal to one per centum of the gross earnings of their respective roads."³⁷ A consistent construction would result in the payment of one per centum on the gross earnings, not only of that portion lying within the state,

³⁵ Seligman, "Essays on Taxation," p. 201.

³⁶ See Laws of Wisconsin, 1854, Chapter 74, Section 2.

³⁷ Laws of Wisconsin, 1860, Chapter 174.

but of the whole road. That is evidently the letter of the law. The courts have held that the interpretation would be valid when applied to domestic corporations.³⁸ The practice, however, was not in accordance with the law.

Mr. Samuel D. Hastings, who was State Treasurer from January 4, 1854, to January 1, 1866, accepted the methods in force when he came into office. When the law was changed from a tax to a license fee, and as we have seen, omitted the distinction between earnings in the state and gross earnings, he evidently did not take the trouble to change the methods used in determining the railway tax, but continued the old practice of letting the railways assess themselves. The question of a change did not even occur to him, if we may judge from the official correspondence.³⁹ The railways of course, gave that interpretation to the law which best served their interests, but there was no unity of action, each road adopting its own method. The Racine and Mississippi (Western Union), in 1860 operated from Racine, Wisconsin, to Rockford, Illinois, a distance of one hundred and four miles. The officials write that for the year ending December 31, 1860, "The Trustees have prepared the following report embracing the particulars designated in the forms provided in the terms of the Statute as far as they are applicable to the property."⁴⁰ They reported the number of miles in Wisconsin, the gross receipts of the whole line in Wisconsin and Illinois and the proportion of gross receipts according to per cent. of whole mileage in Wisconsin. They paid taxes on the amount of re-

³⁸ *State of Maine vs. Grand Trunk R. R. Co.*, 142 U. S. 217.

³⁹ Vaults of Treasurer. Copies are filed of all letters leaving the office. Those of 1860-62 show no question as to the earnings, etc., as reported, or per cent. paid by the railroads. Vol. II, pp. 756, 903. Vol. 16, p. 73; p. 318.

⁴⁰ Reports from vaults of Secretary of State in 1862.

ceipts thus found in Wisconsin.⁴¹ The difference in amount of taxes paid and taxes due under the law amounts to several million dollars.

In Michigan, soon after the Railroad Commissioner was given the duty of computing the tax, he was instructed by the legislature to investigate the reports from interstate roads, and he found that in the past the railways had reported "earnings for Michigan, but not the gross earnings on the whole road." He contended that the tax should be based upon the average gross earnings per mile of the whole road, the Michigan proportion to be determined by road mileage. The railways claimed that if they were to be assessed for the average gross earnings, they should be permitted to report on leased lines and lines in which they had a controlling interest, and that the average earnings of all these should be the basis of computation in Michigan.⁴²

Owing to a technicality the court decided in a test case against the state, but the legislature, by the law of 1883, corrected the difficulty. The railway company thus involved then consolidated many of the proprietary and leased lines, "thus reducing the earnings per mile and its taxes in the state proportionately" according to the railroad commissioner.⁴³

"With a view of approximating as closely as possible the traffic of our own state, exclusive of that originating elsewhere, I prepared the blank sent to the companies, on which to make their report for 1883 with reference to information as to the freight forwarded and received at Michigan stations. I was aware that there would be obstacles in the way of a strictly accurate report of local traffic, some of the companies having so kept their statistics as to enable them to separate the business of ter-

⁴¹ Reports for 1862 in vaults of Secretary of State.

⁴² R. R. Comm., 1881, p. XXXI.

⁴³ Railroad Commissioner's Report, 1884, p. XXXIV.

minal stations, not destined to local points on their own lines from that of a strictly local character." ⁴⁴

In 1891 the law was amended, giving the railways the option of reporting gross earnings on interstate commerce upon either road mileage or traffic mileage. But in 1893 the legislature, in Act 129, made it imperative that they report according to traffic mileage for all interstate business,—"and when the railroad lies partly within and partly without the state, *prima facie* the gross income of said company from such road for the purpose of taxation shall be on the actual earnings of the road in Michigan, computed by adding to the income derived from the business transacted by said company entirely within this state, such proportion of the income of said company, arising from interstate business as the length of the road over which such interstate business is carried in this state bears to the entire length of the road over which said interstate business is carried." ⁴⁵ This method of localization is explained by Tax Commissioner Oakman, as follows:—"This provision may be construed literally as follows: a road having three-fourths of its line without the state, and one-fourth within the state, would have to give to Michigan one-fourth of its gross income from interstate business, only when such income was derived from a haul over the entire length of the road. Thus if the haul extended over the entire length of the road without the state, and over one-half of its road within the state the proportion of gross income for Michigan from such haul would be one-sixth of the total." ⁴⁶

It is obvious that this method of localization can be applied only to earnings from operation; and as gross earnings have been defined as including income from other sources, such as interest on bonds, rentals, etc., it is

⁴⁴ *Ibid.* for 1884, p. XI.

⁴⁵ *Railroad Comm. Report, 1893, II.*

⁴⁶ *Report Mich. Tax Comm., 1900, pp. 143, 144.*

plain that the law provides no means for their distribution. As has been pointed out, the Railroad Commissioner insists upon including these sums in taxable gross earnings. As a result the reports of gross earnings are estimates. In regard to the working of the law he says: that "the statute leaves no room for an estimate of what the earnings may be. The total earnings must be determined by an exact calculation of the amount earned by each company in transporting either small articles or bulky freight. In the limited time given for investigating the matter, this department has discovered that railroad companies, in their reports, either estimate their Michigan earnings, or include only such as are easy of calculation, both methods being contrary to law."⁴⁷

The Railroad Commissioner in 1897 advocated a return to the apportionment of gross income according to track mileage, saying that the total tax for all roads, based on track mileage would have been \$876,705.53, while the actual taxes paid on reported earnings in Michigan were only \$584,269.45.⁴⁸

There is a conflict of evidence as to the method of procedure used to localize Wisconsin's share of earnings from interstate traffic. On the one hand the Comptroller of one of the railway companies operating an interstate line says:—

"I think that it is the universal custom of railroads in arriving at earnings in any particular state, to first take the earnings on the purely local business, *i. e.*, originating and terminating in the state without passing out of the state en route, to which is added a proportion of the interstate mileage business arrived at on the base of mileage. As an illustration: If a shipment on which the gross earnings were \$30, was carried a total distance of 150 miles, one hundred of which were in Illinois and fifty in Wis-

⁴⁷ Railroad Comm. Report, Michigan, 1897, p. XL.

⁴⁸ *Ibid.* 1897, p. XLII.

consin, the earnings would be divided one-third to Wisconsin and two-thirds to Illinois.⁴⁹ This computation is made by taking each separate way bill and assigning to each state the amount that it is ascertained belongs to it."⁵⁰

There is an agreement among the statements made by the railway officials who were asked for the methods followed by their companies in determining the gross receipts for the purpose of the tax. Their replies corroborate the statement above quoted. On the other hand, according to the state railroad commissioner, the method now in vogue is for the railway companies to compute the state's share of earnings from interstate traffic on the train mileage basis. He says:—"The gross receipts of an interstate railroad in Wisconsin is ascertained by computing all the pan-state traffic, and adding the interstate traffic computed on the train mileage basis." Train-mileage . . . is the aggregate number of miles run by revenue trains."

The former method, if followed, is probably more equitable than the computation on a train mileage basis. Train mileage depends, very largely, on the physical characteristics of a railway and the physical characteristics vary in different states. In one state an engine may be able to haul forty cars, in another only twenty. Train mileage would also include the local traffic, and thus a great difference might appear. If earnings were divided according to train mileage, the result might be an undue proportion of earnings being made taxable in the state where earning power per train was least. Under either method, even if it be granted that the reports of the railways are made by honest officials and to the best of their

⁴⁹ Letter from L. A. Robinson, Comptroller of C. St. P., Minn. & Omaha Ry., dated January 25th, 1902.

⁵⁰ Letter of Frank P. Crandon, Tax Commissioner of the C. & N. W. Ry. Company.

knowledge, gross receipts for the railways engaged in interstate traffic can only be approximated. "The officials of the through or trunk lines declare, for the most part, their inability to divide their statistics upon state lines."⁵¹

This question of the division of earnings on state lines was the subject of investigation by a special committee of Railroad Commissioners and was discussed before the National Conference of Railroad Commissioners, for several years. Members of the Association of American Railway Accounting Officers were present and took part in these discussions. It was acknowledged by both Railroad Commissioners and Accounting Officers that unless operating divisions ended at state lines it was impossible to give anything better than an estimate of earnings within the state.⁵² A committee of the convention reports in 1894 on the problem of dividing earnings and expenses on state lines, that "at present the number of miles within a state as compared with the total mileage of a reporting company, is accepted in many cases as the basis of estimating gross earnings within state lines."⁵³ This method the committee considered far from satisfactory, owing to the great variety in density of traffic. Difference in density of traffic would mean difference in earnings per mile, and thus the proportional division of earnings according to mileage of road would be inequitable. The committee recommended a method of apportioning earnings which utilizes the station accounts by making them the basis for

⁵¹ Report Railroad Commissioners, Iowa, 1899, p. 5.

⁵² See remarks by Mr. Sturgis, member Executive Committee of the Association and representative of the C., B. & Q. Proceedings of National Convention of Railroad Commissioners, Washington, 1895, p. 15.

⁵³ Proceedings of National Convention of Railroad Commissioners, Washington, 1894, pp. 54 and 55. Prof. H. C. Adams was chairman of this committee.

the computation of gross earnings from operation. The receipts from interstate traffic were to be pro-rated on the basis of agreement between lines for the exchange of traffic.⁵⁴ It is doubtful, however, whether this method is strictly followed.⁵⁵

The experience in Wisconsin and other states shows that the chief characteristic of the executive officials in our state and local governments is official inertia. Accepting a public trust implies the acceptance of official traditions, habits, and precedents. To violate this rule brings down upon the culprit the wrath of the unseen forces. Public opinion, when aroused, may be the impetus to renewed action, or an exceptional official may vigorously fulfill his duty, but the official life is short, and the public sleeps or forgets; the unseen forces never do either.

It is most important that the customs and habits of the people, the customs and habits of officialdom be considered when the law is framed. The movement of the machinery depends upon the officials; the officials on the other hand conform necessarily to a large degree to the machinery. The machinery may lack the motive power and can not operate of itself, but it is most important that

⁵⁴ *Ibid.* p. 56. "Resolved . . . second, that each State shall be credited with all the earnings derived from business originating and terminating within each State; on business coming into, going out of, or through each State, the earnings shall be prorated in proportion to the average of local charges on such business in the respective State, and on the respective lines.

Third, that the earnings and income from other sources than transportation shall be credited to each State on a mileage basis.

Fourth, that the operating expenses shall be charged to each State on the basis of train mileage in such State." Similar resolutions were adopted by the convention the following year.

⁵⁵ The various methods of distributing the value of railways among the States are discussed in "The Commercial Valuation of Railway Operating Property." 1904 U. S. Census. Bulletin No. 21.

it be constructed as nearly perfect as possible, so that it may run with the least friction. Since inertia is the rule of official life, the laws should be explicit in all its provisions; its terms should be defined and its machinery self-operative so far as is possible.

The peculiar fitness of the tax on gross earnings is to be found in the assessment feature. Under the law taxing gross receipts, the discretionary power of the state officials is not great, and the taxable value of the railways is determined in accordance with a definite rule.

The strength of this method of taxing railway property is best shown by comparison with those systems which give great discretionary power to the state officials. The abuses, injustice, and corruption engendered among our officials and in the body politic under the latter system are immeasurably greater than the possible loss of a few dollars through the perjury of the railway officials.

CHAPTER IV.

THE CLASSIFICATION OF RAILWAYS AND THE DISTRIBUTION OF BURDEN.

INTRODUCTION.

In addition to the administrative problems connected with the enforcement of the tax on gross receipts, there is a group of economic problems resulting from its enforcement, perhaps the most important of which are the questions to what extent are gross earnings a reliable base for a tax and what is the relative effect of the tax upon the different railways.

This and the two succeeding chapters will include a study of gross earnings as a base for a tax:—first, the equitable distribution of burden among the railways as modified by this classification, and tested by net earnings; second, the reliability of gross earnings as an indicator of value as tested by the market price of the stocks and bonds; third, the effectiveness of a tax on gross earnings over a term of years as measured by net earnings. As the fairest test of a tax is that of its actual workings compared with those of other systems in operation, one chapter will be devoted to the study of the comparative effectiveness of a tax on gross earnings and a tax *ad valorem* as shown by the experience of several states.

An examination into the equity of the tax involves a comparison of the relative burden borne, which, in turn must be based upon some standard of comparison. If an accurate measure of the value of railways existed, the task would be comparatively simple. In the absence of

such a guide, it is necessary to test the gross earnings method by such standards as are available.

The history of our railways is such that it has rarely been true that those in authority have taken an attitude towards the railways which would secure equality among them. During the early periods of construction, the state or the municipality extended its financial aid to individual railways; at other periods it has classified them for the purpose of regulating rates; and again, perhaps, it has in other ways favored some railways above others. The same tendency has been shown in regard to taxation in that light burden, exemption, even marked favoritism have often appeared. The aid and exemptions have been due to the important part which railways have played in developing the country. To what extent this policy should be followed will not be discussed, but that it still occupies a place in our tax systems must be recognized. It is one of the factors which accounts for the classification of railways in those states where the tax on gross earnings has been the chief method of securing revenue from them. In Minnesota the railways pay a tax of 1 % on gross earnings during the first three years of operation, 2 % during the next seven years, and 3 % thereafter. In Maine, Michigan,¹ and Wisconsin the law classifies railways according to gross earnings per mile, increasing the rate as gross earnings per mile increase.

¹ In Michigan all railways paid:—

Two and one-fourth per cent. on gross income not exceeding \$2000

per mile.

Three and one-fourth per cent. on gross income in excess of \$2000,
not exceeding \$4000 per mile.

Four per cent. on gross income in excess of \$4000, not exceeding
\$6000 per mile.

Four and one-half per cent. on gross income in excess of \$6000, not
exceeding \$8000 per mile.

Five per cent. on gross income in excess of \$8000.

Were it not for this classification, the equitable distribution of burden, with net earnings used as the standard of ability might be comparatively easily determined. For, as the ratio of operating expenses to gross earnings varied, the share of the burden would vary, and the problem would be how great are the variations which occur. The effects of the tax on gross earnings, however, have been so modified by the classification that it is necessary to study the problem of equity in the light of the experience of typical states where such a classification has existed. The history of the classification in Wisconsin will be taken as the basis of the study, because, there the classification is most pronounced.

A. CLASSIFICATION IN WISCONSIN.

In Wisconsin the first law which divided the railways into classes was one of the results of the Granger movement. Popular sentiment in 1874 demanded, not only a decrease in the traffic charges of railways, but also an increase in the rate of taxation on railway corporations. In answer to this demand, the rate was raised from three to four per cent, of the gross earnings on all railway companies. The general industrial depression and two years' experience with the traffic charges fixed the "Potter Law" placed all but four of the railways in the state in a bankrupt condition.

It was clearly not expedient to levy a tax of four per cent. on the gross receipts of those railways which were not earning sufficient to pay the interest on their bonds. On the other hand, popular sentiment would not permit the rate on gross earnings of the comparatively prosperous roads to be reduced. To meet these conditions the railways were divided into three classes according to

gross receipts per mile.² Those railways whose gross receipts were \$3,000 or more per mile per annum constituted the first class; the second class included all railways whose gross receipts per mile were between \$1,500 and \$3,000; and the third class included all those whose gross receipts per mile were less than \$1,500. On the railways of the first class a tax of 4 % on gross earnings was levied; on the second a tax of 2 % on that portion of the gross earnings which exceeded \$1,500 per mile; and a specific tax of \$5 per mile of railway. Railways falling in the third class paid only a specific tax of \$5 per mile of road.³

The two objects of the classification were secured. The more prosperous roads fell in the first class and the state received a goodly revenue from them; while the weaker roads passing through undeveloped country were favored and thus the industrial development of the state encouraged.

During times of industrial depression in Wisconsin, as in other states, the individual tax-payer, feeling more keenly the burden of taxation, has turned his attention to corporations, and especially to the railways as sources of revenue. The financial and industrial disturbances commencing in 1893 again brought the question of railway taxation before the public. It was said that railways were not paying their fair share of taxes, and the demand was made that their burden be increased.

The result of the agitation for an increase in the relative amount of taxes paid by the railway companies which concerns us in this chapter was a change in the classification. The object of the change was not only to increase the revenue derived from the railways and to correct cer-

² Laws of Wisconsin, 1876, Chapter 97.

³ Railways operating on pontoon bridges paid 2 per cent. on gross earnings.

tain defects in the old classification, but also to appease the people and to postpone the question of an increase in the rates on all railways.

Discussion had revealed the fact that the old classification not only injuriously affected the revenues of the state, but worked unjustly among the railways. It was demonstrated that some railways, strictly obeying the law, might by means of the classification escape what would seem to be their just share of taxes as compared with other railways.⁴

To correct such faults was one object of the law of 1897, which divided the railways into six classes as follows:

Class.	Gross earnings per mile.	Tax.
First.....	\$3000 or more	4 %
Second.....	2500-3000	3½ %
Third.....	2000-2500	3 %
Fourth.....	1500-2000	\$5 per mile and 2½ %
Fifth.....	Less than \$1500	\$5 per mile
Sixth.....	On pontoon bridges	2 %

The objects of the law were, as has been said, to increase the revenue from,—and to secure equity among,—the railways. The law was successful in that there was a slight increase in the revenue from railways; but it contained features which, from a revenue point of view permitted conditions to exist as pernicious as those which existed under the former classification. For example:

“The taxes paid by the Green Bay and Western Railroad in 1897 were \$3,745, and its gross receipts were

* This is illustrated in the case of Minnesota, St. Paul and Sault Ste. Marie Ry. Co. In 1895 this company paid a tax of only \$9,486.15; their gross receipts per mile falling just below the limit of the first class. The next year they paid a tax of \$37,077.15; their gross receipts per mile being slightly above \$3000, this bringing them into the first class. Report of Railroad Commissioner, 1897, p. 7.

reported at \$442,319 or \$1,965.86 per mile. Under the law if the road had earned \$35 more per mile it would have paid a tax of \$13,500 instead of \$3,745. That is, a difference of less than \$8,000 of gross earnings by this road, made a difference in its taxes of nearly \$10,000."⁵

This is only one of several similar cases which might be cited. It is evident that the Tax Commission did not believe the law was satisfactory from a revenue point of view, for they recommended that, ". . . there should be a closer classification of rates in such a manner that a very slight difference of earnings would not so unfavorably affect the revenues of the State."⁶

Undoubtedly the new classification tended more toward equity among the railways than did the old. A classification with six divisions permits finer distinctions than one with two or three divisions. But there still existed great inequalities among individual railways. Accepting net earnings as the measure of ability to pay, many inequalities are made evident. Taking the year 1899 as an example, we find that in the first class there is a railway whose net earnings were only 23.27 % of its gross earnings, which paid a tax of 4% of gross earnings; while in the fifth class a railway company which had net earnings amounting to 49.45 % of gross receipts paid a tax of only five dollars per mile, or two-thirds of one per cent. on gross earnings.

The Tax Commission endeavored to show the inequalities in the classification by a comparison of cost of construction, and of the rate paid on such cost, using the taxes paid in 1897 to compute the rate. From this they were able to show that under the present classification a railway costing over \$3,000,000 paid a tax of less than \$500, that one costing over \$800,000 paid a tax of less than \$150. The Tax Commission did not argue that

⁵ Report of Wisconsin Tax Commissioner, 1898, p. 133.

⁶ *Ibid.*

cost was a fair index of present value, but said that it could not be entirely disregarded in estimating present value.⁷ It should be noted that most of the railways referred to above were in the fifth class. Some of the railways paying only the specific tax declared dividends on their stock, while others were in the hands of receivers. The Tax Commission recommended in 1898 that the specific tax be abolished,⁸ and that there should be a "closer classification." The Governor recommended ". . . in view of these very noticeable inconsistencies" (he is speaking of the relation between taxes and cost and of the fact that some railways in the fifth class paid dividends) "that the classification be abolished, and a uniform license fee upon their gross earnings be charged all railroads doing business within the State regardless of what their mileage or earnings may be."⁹

Although the defects of the classification and the inequalities resulting from it gave rise in some quarters to the demand for its abolition and for the establishment of a uniform rate, there was no attempt to discover either whether there was a justification for the classification and the tax on gross receipts or whether the system to be substituted would more equitably distribute the burden among the railways. That is, there was no serious attempt to discover to what extent gross earnings were a reliable base for a tax.

II. THE BASIS OF THE CLASSIFICATION.

The experience of Wisconsin suggests three grounds upon which a classification based upon gross earnings may be defended.

⁷ Report, 1898, p. 134.

⁸ *Ibid.*

⁹ Message of Gov. Edward Schofield, Madison, Wis., 1899, p. 10.

- (1) It encourages railway construction.
- (2) It recognizes the tendency of operating expenses to decline proportionally as gross earnings per mile increase.
- (3) It maintains that ability increases at greater rate than net earnings.

I. As to the first, the classification was used to encourage railway construction by providing for light taxation during the years of operation when traffic was light and earnings were low. How far this policy is desirable is a question outside the field of taxation, which will not be discussed.

2. There is a very general belief, often asserted, that a tax on gross earnings does not equitably distribute the burden among the railways because it does not take into consideration the difference in cost of operation. The Michigan Tax Commission states this objection as follows:—

“The operation of a specific tax on gross income tends to bring about a marked inequality in assessment as between the roads, conditions of operation do not enter into the question, and one road, by reason of its favorable conditions of traffic, may be operated at a very much less ratio of expense to income than another road of equal length, having expenses at a much higher percentage. Where its gross income may be the same, its net earnings power and its actual net worth may be much less than the former, and it is manifestly unjust that it should, by reason of these adverse conditions, be required to pay as much tax to the state.”¹⁰ That this is true in some instances cannot be denied.

The classification, however, may be said to be an attempt to take into consideration the differences in the cost of operation; the theory being that the denser the traffic, and the larger the business, the less the proportionate cost of operation. That is, as gross earnings increase per mile,

¹⁰ Michigan Tax Commission, 1900, p. 144.

the per cent. of operating expenses to gross earnings decreases. Taking net earnings as a basis of valuation, we see that as the amount of net earnings increases it is necessary to levy a heavier rate on gross earnings in order to lay the same rate on valuation.

Let us see to what extent this theory is justified by the facts as shown through railway operations in Wisconsin.¹¹

These operations disclose two phenomena which are due to the classification. Taking the railway by classes as determined by the amount of gross earnings per mile, we see that the average per cent. of operating expenses to gross earnings decreases as gross earnings per mile increase, that is, the greater gross earnings, the greater the per cent. of net earnings. This is true if taken for one year. For example, if we take the per cent. of operating expenses to gross earnings as the basis of comparison in Wisconsin, it becomes evident that the operating expenses of the roads in the first class, whose gross earnings exceed \$3,000 per mile, average only 58.22 per cent. of gross earnings; the mean being 59.58. The railways of the third class whose gross earnings exceed \$2,000 per mile, have an average of 67.51 per cent., the mean being 68.25 per cent. Those of the fourth class with gross earnings greater than \$1,500 per mile, have an average percentage of 82.48 per cent. with a mean of 72.08 per cent.; while the railways of the fifth class expend on an average 81.14 per cent. of gross earnings as operating expenses, with a mean of 74.34.¹² Taken for a series of five years, the results do not show so great a difference between the classes as for the one year period; yet, except in the case of the two roads constituting the fourth

¹¹ See Table No. I, Appendix, p. 127.

¹² See Table No. I, Appendix, p. 127.

class,¹³ the same tendency is shown by the average. The tendency in other states, Missouri and Minnesota, for example, is in the same direction, though with greater variations.¹⁴

Looking through a period of years at individual roads whose gross earnings have increased markedly, we find that the tendency is for the ratio of operating expenses to gross earnings to decrease as gross earnings increase.

If we select representative systems in the Middle West, there is equal uncertainty in answering the question whether or not through a series of years operating expenses decrease or increase in proportion to the increase in gross earnings.¹⁵

On the other hand, statistics covering a longer period of years, and a larger number of roads, give very different results. When all the railways in the United States are considered as one system and the increase in gross earnings per mile for a series of years is considered, it is evident that the operating expenses increase at about the same rate as the gross earnings.¹⁶ The averages secured from groups of states show the same results.¹⁷

An examination of the railway companies in several states shows that a tendency does exist for those roads where traffic is light to be operated at a proportionally greater expense than where the traffic is dense. It seems clear that the exceptions and variations from the average

¹³ See Report Wisconsin Tax Commissioner, 1903, pp. 206-208.

¹⁴ See Table No. II, Appendix, p. 128.

¹⁵ See *infra*, Chapter V, Section II.

¹⁶ See *infra*, Chapter V, Section II.

¹⁷ It is only fair to say, however, that this criticism of the theory has its weaknesses. The statistics were, in the first place, averages of all the railways, and therefore might easily fail to show the operation of the majority of the individual companies; and, in the second place, the comparison was for a series of years and no account was taken of the increased cost of materials and labor.

by which the rule was formulated are too numerous to justify a classification on this ground alone, though it may be said that the classification would secure more equity than no classification. This will be seen when we apply the rates of tax on the various classes after examining the other theory of the classification.¹⁸

3. The principal justification of the classification is based upon the theory that ability to pay increases at a greater rate than net earnings. The law maintains that if a given income gives a fair return on cost of physical property, or on capital invested,—where an increase in net income gives an increased return on capital,—the state

¹⁸ Too great weight should not be given to results based upon the statistics showing net earnings. The term net earnings or receipts is used by railway officials to describe several different items, as may be seen by an examination of railway reports. The item usually selected to represent net earnings is income from operations, income from other sources being sometimes added to this. Income from operation consists of the gross earnings from operation minus operating expenses.

The practices followed in estimating operating expenses are not uniform or consistent. Net earnings occupy the position of the residual claimant;—that is, from gross earnings are deducted (a) the expenses of conducting transportation, (b) the general expenses, including legal expenses, rentals, insurances, etc., (c) the maintenance of equipment, (d) the maintenance of way and structure. What items should be included under the various heads we shall not presume to say. All that is necessary is to point out that the difference in the practice followed by the various railways in charging betterments to operating expenses are sufficient to invalidate net earnings as now used as a safe base for a tax or as a reliable measure of the comparative burden borne by different railways.

For example, should one company charge improvements and additions of property to operating expenses, thus reducing net earnings, and another company either pay for similar betterments from capital or not make the improvements, the net earnings of the respective roads would not be a measure of the difference in earning capacity of the two roads. Evidences of these practices are common knowledge. In the case of interstate roads the problem of the localization of earnings further complicates the situation.

also should receive an increased return; that is, that the rate on earnings per mile should be raised.

For example, suppose that increased earnings provided for an increase of dividends from three to six per cent.; then the rate on net earnings taken for taxes should, let us say, double. Therefore, in order to increase the rate on net income, it is necessary to increase the rate on gross earnings as the latter increase per mile.

To sustain this theory, it must be shown that in the case of the individual railway (1) net earnings increase with an increase in gross earnings, (2) that the capital invested does not increase at the same or greater rate than net earnings, and in the case of two or more railroads it must be shown that (3) roads having equal gross earnings per mile have an equal amount of capital invested, and (4) equal net earnings.

Under existing conditions, the first two propositions may be conceded to as being generally true, although hypothetical and even actual cases which are exceptions could be cited.¹⁹ Granting these points, the problem becomes one of policy as to whether or not the progressive tax should be adopted, and in what manner the rate should be determined.

The third and fourth points relating to the equitable distribution of burden under the classification give rise to the problem of valuation. This problem is so complicated that we can call attention in this chapter to only the salient points. The two chief elements in the value of a railway, that is, the cost of reproduction and the earnings attract attention as bases for estimating the amount of capital invested.

Without discussing the reliability of these methods of determining value some of the conditions revealed in Michigan by the most thorough of all attempts in this

¹⁹ For confirmation of the first point, see Chapter V, Section II.

country to appraise the value of the railways will be pointed out. The engineers' estimate of the cost of reproduction made by Professor M. E. Cooley was supplemented by a valuation based upon earnings computed by Professor Henry C. Adams. The valuation revealed that railways having approximately equal amounts of gross earnings per mile varied widely in value if measured either by the cost of reproduction or by the value based upon earnings.²⁰

If earnings are taken as the basis of valuation, then the shifting and adjustment of the value of property to the income derived may tend to produce for roads having the same equal earnings equal valuations. However, so many other elements enter into the valuation to modify this action, that it is not an entirely reliable adjuster of values.

In regard to the fourth point, the relation between the net earnings of the different classes has been discussed above. It remains to be pointed out that in each class more or less inequalities exist.

In actual operation the classification, tested according to the theory of the law, seems to justify itself.²¹ It will be remembered that the tax on the first class was 4 % of gross earnings, on the third 3 %. Now it is evident that if we wish to leave the railways in the same relative positions after taxation as they occupied before taxation, 4 % on 42 % (the net earnings of roads of the first class) and 3 % on 33 % (the net earnings of the third class) will more nearly accomplish this than a uniform rate for both, for the ratio is almost equal, that is 4:42:3:31.5. A similar difference is also found in the case of the roads of the third and fourth classes. Now, if you do not wish to leave the railways in the same rela-

²⁰ See Table No. III, Appendix, p. 130.

²¹ In examining the workings of the tax, the second ground for the classification should also be borne in mind.

tive positions after taxation as before, but wish to levy a progressive tax, the conclusions remain the same.

Granted that net earnings capitalized measure faculty, the classification can only be justified on the grounds of encouraging railway construction, or as a revenue producer.

Granted either that the ratio of operating expenses to gross earnings decreases as gross earnings increases, or that the faculty increases at a greater rate than net earnings:—the tax on the gross earnings of railways classified according to earnings per mile tends toward an equitable distribution of burden. The inequalities which exist will be confined to the differences in cost of construction and cost of operation of the roads in each class.

To secure equity, the classification should be closer than in Wisconsin, and the graduation of the rate should be a matter of careful study. The inequalities that still remain can not be avoided, but before they are permitted to condemn the system they should be subject to a comparison with the inequalities which exist in all other systems.

CHAPTER V.

GROSS EARNINGS AS AN INDICATOR OF VALUE.

INTRODUCTION.

The question whether or not gross earnings are a reliable indicator of the taxable value of a railway can not be finally answered without establishing a criterion of tax value. No such criterion has as yet been established, though several methods have been used for estimating the value of a railway.

The object of this chapter is to discover to what extent these methods give a reliable basis to measure the effectiveness of a tax on gross earnings, and to what extent gross earnings are a reliable base as tested by the two most important of these methods, that is, the market price of the securities, and the net earnings.

I. AS MEASURED BY STOCKS AND BONDS.

The market price of the stocks and bonds has often been held to measure the value of a railway. The chief and much quoted authority on this subject is Mr. Justice Miller, who said in the State Railroad Tax Cases:—"It is therefore obvious that when you have ascertained the current cash value of the whole funded debt, and the current cash value of the entire number of shares, you have, by the action of those who above all others can best estimate it, ascertained the true value of the road, all its property, its capital stock, and its franchises; for these

are all represented by the value of its bonded debt and of the shares of its capital stock."¹

The objections to this method of determining the value of a railway are both practical and theoretical, for whenever applied, it has been impossible to ascertain "the current cash value of the entire number of shares." In the first place, railway securities are not all on the market. In one of the most thorough attempts to apply this method the Interstate Commerce Commission found that "it was necessary to carefully examine a vast number of railway reports, price lists, and market quotations, and to conduct long correspondence with thousands of railway officials and other persons presumably able to furnish the necessary information."² In the end, they were confronted with the fact that out of over two thousand corporations issuing securities, there were only two hundred and twenty-five whose securities were quoted in such a manner as could be used.³ When the Wisconsin Commission applied the method, they found quotations for only eight out of forty-six railways,⁴ and the Michigan Commission were able to determine the market value of the stocks and bonds of only twelve out of one hundred and twenty-five railways.⁵

Moreover, when a railway company was listed upon the stock exchange, it did not necessarily follow that all classes of its securities were quoted. These conditions made it necessary, in all these attempts to apply the method, to estimate the market value of a large number

¹92 U. S. 575. Quoted by Wisconsin Tax Com., Report, 1903, p. 187. This report gives in detail the principal arguments, and authorities in favor of the stocks and bonds method of valuation of railway property.

²U. S. Senate Document No. 178, 57th Congress, 2nd Session.

³Ibid.

⁴Report, 1903, p. 203.

⁵Report, 1900.

of securities. As the method is one that pretends to give the buyer's statement, when other estimates enter in the basis is changed and the results are not what they seem to be.

In the second place, the objection has been raised that the securities quoted do not represent the property appraised. For example, the value of stocks and bonds, when used for purposes of taxation, includes localized property not used for railway purposes and locally taxed, —perhaps even located in different states. In discussing this point Prof. B. H. Meyer says:—"The greatest difficulty in applying the stocks and bonds method in arriving at a commercial valuation of railway property devoted to operation, lies in the separation from the former of property not devoted to operation. The stocks and bonds of a railway company represent the value of all property of the company, whether devoted to operation or not, lands, real estate in cities, mines, manufacturing plants, elevators, warehouses, stocks and bonds of other companies, etc."⁶ Another similar objection is that the securities used for determining the value of a railway often do not represent the property. For example, objections were raised in Wisconsin to the application of the market price of the securities of a system to the securities of a branch of the system.⁷

It has been pointed out that not all the securities even of those companies listed are on the market. Moreover, of the securities of a given class offered for sale, only a small portion, or small blocks are sold at one time, so that market prices show only the prices paid for a small percentage of the total number of shares. These are

⁶ Prof. B. H. Meyer in "The Commercial Valuation of Railway Operating Property in the United States," U. S. Census Bulletin No. 21, 1904, p. 19.

⁷ *Infra*, Chapter VII.

grounds for the third criticism of market price as a criterion of the value of a railway.

In examining "market price" as a test of value, there are three chief factors to be considered,—(1) Exchange practices, (2) Control movements, (3) Investment securities.

(1). Exchange practices.

Among the objections to market price as a criterion is the fact that quotations are often given when no sale has taken place. Mr. Dickenson says on this point:—"When there are no transactions whatever, it is a recognized daily practice to make a transaction before the close of business hours, in order to give the stocks or bonds a place in the quotations. There may be no demand or sale, but one is forced for the purpose, and so it goes out on a particular day that the price was quoted."⁸

Under this head of exchange practices, may be included the purely speculative purchases which are so characteristic of our stock exchanges that little comment upon them is necessary. Mr. Dickenson's commentary upon this point is illustrative of common practices. He says "stocks are especially subject to the speculative tendencies of the times. When the speculative fever is high a stock may run up without any apparent cause twenty-five points or more, and at other periods when there is no speculation, it may go much lower."

It is obvious that to the extent that they are common these practices vitiate market price as a criterion of the value of the property.

A share of stock is valuable, not only from its right to participate in the earnings of a property, but from the fact that it gives a control over the corporation. In fact,

⁸J. M. Dickenson. *Railway Taxation in Wisconsin. Argument made before Joint Commission on Assessment and Collection of Taxes. Wisconsin Legislature. Madison, Wis., 1901.*

the owners of many of the stocks issued can have no hope of dividends in even a distant future; in which case the market price represents either the speculative movements mentioned above or a value due to the control which the ownership of the securities gives.

The market value of stocks and bonds is sometimes inflated beyond the real value by these circumstances of "control." For example, if the majority stock is held in block, all of the other stock may command no price whatever on the market. "Market price" under these conditions would be of little use as a measure of value of the railway.

On the other hand, it should be borne in mind, that while some of the securities are valuable on account of the control element, others are valuable and have a market value, because they produce an income. In the case of these latter securities, it may be argued that the market price is lower instead of higher than the value put upon them by the holders. For if the market price were higher than the value placed upon the securities by the holder, he would dispose of them at the market price.

It is doubtless true, however, that while the few shares transferred on the exchange may bring a given price, if the total number of securities were placed on the market, the price would decline so materially that the price paid for the few would be no indication of the market price of the whole.

When the securities are held as an investment on account of their income producing ability, the amount of income is limited by the amount of net earnings. Other elements may enter into the valuation to modify the relation between net earnings and market price,—such as a feeling of risk depending upon the general physical condition of the road, and the policy of the officials, but the

chief factor that enters into the valuation is the income produced.

To what extent each of these different elements enters into the "market price" it is not possible to determine, but the objections are strong enough to indicate that the market price of stocks and bonds is not an absolute or an accurate measure of the taxable value of a railway.

Although the estimated market price of the securities of a company is not an accurate guide to the taxable value, it is interesting to use the value thus determined to test the gross earnings as a base.

A comparison of the market price of securities and the gross earnings of all railways in the United States gives indications of the relation between market price and gross earnings. Taking the railways by groups, we find that the ratio between gross earnings and market price ranges from 11% to 40%. The average, however, is 23%, and seven out of the ten groups are within 50% of that average.

TABLE NO. IV.

MARKET VALUE OF SECURITIES AND GROSS EARNINGS.

Group	June 30, 1900 Market Value (*)	Gross Earnings (**) G. E. to M. V.	Per Cent.
I.....	\$578,177,824	\$108,289,736	.18
II.....	2,171,479,126	415,141,934	.19
III.....	826,997,648	239,346,057	.28
IV.....	309,555,625	62,936,302	.20
V.....	559,888,941	124,142,250	.22
VI.....	1,624,388,015	316,651,650	.19
VII.....	341,987,209	63,411,002	.11
VIII.....	992,011,963	139,020,798	.14
IX.....	145,583,253	58,479,629	.40
X.....	598,035,919	119,508,085	.19
			.23

In Wisconsin, where the statistics of the average market price and the average gross earnings cover a five in-

* U. S. Senate Document No. 178, 57th Congress, 2nd Session.

** Statistics of Rys. in U. S., 1904, pp. 77, 78.

stead of a one year period, and where the physical and industrial characteristics of the territory do not introduce so great variations, the ratio does not show so great a range. The difference between the extremes is only 8 per cent. The average ratio between gross earnings and market price is 16.5 per cent., and that of six out of the eight individual railways, the market price of whose securities could be found, is within $2\frac{1}{2}$ per cent. of this average.¹¹

TABLE NO. V.

Road	Market Value (3 Years ¹²)	Gross Earnings 3 Years ¹³	Per cent. of G. E. & M. V.
1. Chicago, Mil. & St. P...	\$74,124,195	\$12,653,708	.17
2. Chicago & Northw'n.....	63,230,046	12,941,244	.19
3. Chi., St. P., Mpls, & A...	28,439,595	3,929,584	.14
4. C., B. & Q.	8,639,315	1,426,010	.16
5. Green Bay & Wis.	1,759,750	474,603	.26
6. Mpls., St. P. & S. S. M.	8,443,000	1,421,630	.16
7. Northern Pacific	3,569,214	438,359	.08
8. Wisconsin Central	26,391,000	4,748,272	.17
			16.5

There is so marked a relation between the amount of gross earnings per mile and the market price of stocks and bonds per mile, that while gross earnings can not be said to be an absolutely accurate guide, they are a fairly reliable measure of the extent that market price indicates value.

II. AS MEASURED BY NET EARNINGS.

I. In order to determine to what extent ability to pay is discovered by a tax on gross earnings, a standard of value is necessary.¹⁴ In accepting net income as this standard, we have adopted the guide generally accepted

¹¹ Statistics from Wisconsin State Tax Com. Report, 1903, p. 203.

¹² *Ibid.*, p. 206.

¹³ For the objections to net earnings as a criterion, see note at end of chapter.

in commercial valuations.¹⁴ Moreover, income from operation was employed as the basis of capitalization by the United States Census Bureau in estimating the value of all the railways in this country.¹⁵ It was also the method followed by Prof. Adams in estimating the value of the railways in Michigan.

A glance at the statistics of railway operations for the past decade will show that if we accept as our measure of faculty the above guide, there has been a marked increase in ability to pay taxes. The statistician of the Inter-State Commerce Commission, in pointing out these conditions, says: "The effect of recent years of prosperity upon the finances of railways is shown by comparing the current year with the year ending June 30th, 1897. By referring to the above summary it appears that the gross earnings per mile of line were \$6,122 as against \$9,306 for the current year; operating expenses per mile of line were \$4,106 as compared with \$6,308 for the current year; and net earnings from operation were \$2,016 as compared with \$2,998 for the year covered by this report. Dividends increased from \$447 per mile of line in 1897 to \$1046 per mile of line in 1904, while the book-keeping surplus increased from a deficit of \$33 per mile of line to a surplus of \$267 per mile of line."¹⁶

Since we are endeavoring to discover to what extent gross earnings are a reliable basis for a tax, from the revenue point of view it is pertinent to ask to what extent a tax on gross earnings would have discovered this increase in value. In choosing net income as the measure of this increased value, let us accept the definition of the

¹⁴ See J. Shirley Eaton. U. S. Census Bulletin No. 21, pp. 153 *et seq.*

¹⁵ *Ibid.* p. 9.

¹⁶ Report Statistics of Railways in the United States. Interstate Commerce Commission, 1904.

term followed by the Census Bureau, namely, income from operation. Income from operation is the function of operating expenses and gross earnings. As the ratio of operating expenses to gross earnings varies, the sum from which taxes should be paid varies also. In order, then, to discover the results of a tax it is necessary to examine the variations of this ratio.

As gross earnings per mile vary, the ratio to operating expenses may increase, remain constant, or decrease. The workings of the tax on one railway under different conditions of gross earnings per mile and different per cents of operating expenses to gross earnings are exceedingly complex.

Introduce variation in capital value, or in the policy of depreciation, maintenance or betterment, and new differences arise. Introduce several roads and the opportunities for inequalities are innumerable. Introduce railway statistics and it is virtually impossible to measure the results. These theoretical possibilities, however, should not wholly condemn a tax on gross earnings, for similar inequalities will be found to exist in any tax system as yet devised.

If we assume net earnings, then, as a measure of ability, we find that a tax on gross earnings would reach the increased value due to increased net earnings, in the case of a constant or an increasing ratio; but in the case of a decreasing ratio, part of the additional value due to increased net earnings would not be reached by such a tax.

Before it can be stated to what extent gross earnings are a reliable basis for a tax, under existing conditions, we must attempt to determine under which of the ratios railways are, as a general rule, operated. After this has been determined, the next step in the procedure is to levy the tax and examine the results.

2. In order to form an opinion on this question let us examine the statistics of railway operation, first of all the railways in the United States; second, of all the railways in a group of states; third, of all those in a single state; and, fourth, of individual systems. The railways in this country considered as one system form an interesting basis for an examination of railway operations. From 1897 to 1904 their average gross earnings per mile increased from \$6,122 to \$9,306; income from operation from \$2,016 to \$2,998; and total income from \$2,699 to \$4,001.¹⁷ The gross earnings during this period increased at a greater rate than did net earnings, the increase of the former being 52 %, that of the latter 48 %. If, however, instead of taking the years 1897-1904 for comparison, we examine the conditions of 1896 and 1903, the statistics show that gross earnings per mile increased 49 %, while net earnings per mile advanced 56 %.¹⁸ During these years (1896-1904) the ratio between operating expenses and gross earnings varied considerably. From 1896 to 1900, the per cent. of operating expenses to gross earnings fell from 67.20 to 64.65, from which point it gradually rose to 67.79 % in 1904. Gross earnings per mile showed an increase of 25 % in 1900 over 1896, while net earnings increased 36 %; but from 1900 to 1904 gross earnings increased 18 % and net earnings only 14 %.

If now, we compare the railways in what Poor's Manual calls the North Central Group,—composed of the states of Ohio, Michigan, Indiana, Illinois, and Wisconsin, the results show similar tendencies. In this group of states, gross earnings increased 47 % from 1896 to 1903, net earnings 42 %, and the per cent. of operating

¹⁷ See Table No. VI, Appendix, p.

¹⁸ Poor, Manual 1904, p. IV.

expenses to gross earnings increased from 69.89 % to 70.81 %.¹⁹ Selecting the railways in individual states, Iowa for example, we find the increase of gross earnings from 1897 to 1903 is 48 %, while that of net earnings is only 27 %.²⁰ The railways in Missouri show an increase in gross earnings per mile from 1897 to 1904 of 41 %, and in net earnings an increase of 30 %, while the cost of operation during the two years is practically the same.²¹

An examination of individual railway between the years 1897 and 1900 shows²² on the other hand, that in the case of the Chicago, Burlington and Quincy, gross earnings increased 26 %, net earnings, 30 %, and the ratio of operating expenses to gross earnings decreased slightly. A similar condition exists in the operations of the Chicago, Indianapolis, and Louisville Railway, where the gross earnings increased 68 % and the net earnings 119 %, the cost of operation decreasing from 70.36 % to 61.51 % of gross earnings. The gross earnings of the Illinois Central increased 49 %, while net earnings increased 50 %.

Here, however, we find that other roads show a gain of gross earnings over net earnings. For example, the Chicago and Northwestern gained 27 % in gross earnings, and only 8 % in net earnings, operating expenses increasing from 60.94 % to 63.105 of gross earnings; the Chicago, Milwaukee and St. Paul shows an increase in gross earnings of 44 %, in net earnings only 23 %, operating expenses increasing from 57.05 % to 63.21 % of gross earnings; the Wabash shows a similar tendency, gross earnings increasing 43 %, net earnings 17 % and

¹⁹ See Table No. VII, Appendix, p. 131.

²⁰ Report of Railroad Commissioner, 1904, p. 9.

²¹ Report of Railroad and Warehouse Commissioner, 1904.

²² See Poor's Manual, 1904.

operating expenses increasing from 69.22 % to 74.81 % of gross earnings.

These variations in the ratio of operating expenses to gross earnings can not be explained as due to any one factor. The different policies with regard to charging betterments to a more or less degree to operating expenses, especially the very general practice of making improvements during prosperous years, and of postponing replacements during lean years, may partly account for some of the changes. Moreover, on the one hand, the greatly increased cost of fuel, and materials, and the advance in wages, and on the other hand the general decrease in rates are indefinite but important factors that have affected the ratio.

While the above and other factors may modify the results, it would not, if we judge by the typical statistics cited, be correct to say that net earnings increase at a greater rate than gross earnings, but that the tendency is, when gross earnings per mile increase, for the ratio of operating expenses to gross earnings to remain fairly constant or to increase.²³

3. To measure the extent to which a tax on gross earnings will reach increased value of railways, let us levy such a tax on the gross earnings of the railways operated under the conditions discovered above. Assume for the purpose of having a standard for comparison that income from operation is correctly reported, and that it is an accurate measure of ability.

In the first place, levying a tax, let us say, 10 % on the average gross earnings of all the railways in the United States in 1897 would have produced an amount equal to a tax of 30.3 % on net earnings. From 1897 to 1904 the gross earnings per mile increased from \$6,122 to

²³ See Table No. VIII, Appendix, p. 131.

\$9,306. A 10 % tax on the latter was therefore equal to 30.3 % on net earnings. In the North Central group of states, a tax of 10 % on gross earnings was equal to 32.7 % on net earnings in 1897, the variations in ratio of net earnings giving a range from 31.9 % in 1899 to 34.4 % in 1903. Examining the individual railways where net earnings increased at a greater rate than gross earnings, we find that the Chicago, Burlington, and Quincy, for instance, shows that a tax of 10 % on gross earnings in 1898 was equal to a tax of 25.9 % on net earnings, while in 1903 the same rate on gross earnings produced an amount equal to 25.1 % on net earnings. A tax of 10 % on gross earnings of the Chicago, Indianapolis, and Louisville, was equal to 33.7 % on net earnings in 1897, while in 1903 it was equivalent to only 25.9 % on net earnings.

The Illinois Central, taxed at the same rate, would have paid 29.7 % of net earnings in 1897 and 29.4 % in 1903. The above instances clearly show if we assume net earnings as an accurate measure, that a tax on gross earnings at a given rate does not reach all the value accruing with an increase in gross earnings. The general rule as shown by the statistics is that the ratio was either constant or decreasing. Those railways which show a relatively larger increase of gross earnings than of net earnings show that a tax of 10 % on gross earnings in every case reached the increased value. For example, levying a tax of 10 % on gross earnings and comparing the burden borne by net earnings in different years, we find that the Northwestern could have paid 25.6 % of net earnings in 1897, and 30 % in 1903; the Chicago, Milwaukee, and St. Paul 23.2 % in 1897 and 27.1 % in 1903; the Wabash, 32.4 % in 1897 and 39.6 % in 1903.

Applying this test to Wisconsin it is found that gross earnings increased from 1882 to 1902—240 %. Income from operation increased 199 %. Owing to the increase in rate taxes increased during the twenty years 291 %.²⁴

Taking net earnings as the measure of value, it is safe to conclude that, with few exceptions, a tax on gross earnings does reach the increased faculty due to increased net earnings, and is therefore reliable as a revenue measure.

NOTE.—Net earnings as a measure of value are subject to the same objection as that often urged as one of the weak points in a tax on gross earnings. This objection is stated by Professor Seligman (*Essays on Taxation*, p. 196) as follows: "It (the tax on gross earnings) takes no account of original cost. . . . For example, when the cost of building a railroad is great, its gross earnings must be correspondingly large, in order to enable the owners to realize any fair return on the investment. A tax on gross earnings does not recognize this distinction. It discriminates unfairly between companies, and makes a line built at great expense and with great risk pay a penalty for the enterprise of its constructors." This objection applies to net earnings as well as gross earnings, as a measure of ability, but it applies with double force, for, as the cost of betterments is charged to operating expenses, the cost of the road increases while the measure of ability, net earnings, decreases. The fact that while a railway may show a deficit from operation, it may still be of considerable value as a railway, should also be noted.

It is assumed in the above chapter that the net earnings capitalized will show the value of the road. But if the theory on which the classifications are based is adopted, then the above conclusions must be modified.

²⁴ See *Wisconsin State Tax Com. Report, 1903*, pp. 213-214.

CHAPTER VI.

THE AD VALOREM SYSTEM.

INTRODUCTION.

Perhaps the fairest test of the effectiveness of a tax on gross earnings would be a comparison with another method of taxing railway property. The predominant system for railway taxation in the United States is the *ad valorem* system. Its characteristic feature, at least in the Middle West, is the appraisal of the railway property by a state board. The most important problem in this connection is to discover the basis of this appraised value. Therefore, in making a comparative study of the system, many questions of importance must be omitted, no attempt being made to trace the development of the tax through legislative changes and interpretations.¹

The plan of this chapter is, first to state the law and then to study its administration. The operation of the system in Missouri has been selected as the basis for study, as the method there has been in force for over thirty years.

I. THE LAW; THE MACHINERY; AND THE PROCESS.

All railroads constructed or in the course of construction, and all other property, real, personal, or mixed, owned, hired or leased by any railway company or cor-

¹ It is interesting to note that there were between 1871 and 1899 over eighty changes made in the wording of different sections of the law.

poration in the state, are subject to taxation for state, county, municipal or local purposes. Such property is assessed by the State Board of Assessment and Equalization. This Board, composed of the governor, the secretary of state, state auditor, state treasurer, and attorney general, meets annually at the capitol, for the purpose of assessing, adjusting and equalizing the valuation of the railway property in the state.

The courts have held that the first duty of the board is to consider in the aggregate and as an integrity, all the property owned by each railway in the state. Its understood value is assumed to have been reported by the president of the company. "If this reported estimate is either too high or too low, it must be 'adjusted,' which, according to the received definition, means 'fitted, made accurate.'" The exact relation which the property bears to a money standard must be so fixed. And, secondly, "if one company, upon a comparison of the extent and amount of its possessions with those of another, appears to have assumed a lower or higher standard of value, they must be 'equalized.'" These processes comprehend the function of the board.

The law provides that data shall be furnished the board in the following manner:—on or before the first of January in each year, the president of each road in operation must furnish to the state auditor a sworn statement describing in detail the length of the road, rolling stock, etc., and the actual cash value thereof. A duplicate of this statement is sent to the clerk of each county in which the road is located. The clerk lays the statement before the county court, which body examines the statement to determine its correctness as to the description of the property and the valuation thereof. If the statement is correct, the clerk at the motion of the court certifies the fact to the state auditor; if found, in the opinion of the

county court, to be incorrect as to description of the property, or the value not sufficient or inadequate, the court states what it believes to be the actual cost value of the property and ascertains what property has been omitted, and returns a description thereof to the state auditor. All property thus omitted is taxed at double its cash value.

The state auditor lays the statements of the president of the railway, and the documents from the county court before the state board. Should the railway company fail to make any returns, the board is authorized to act on the best information it can secure as to the property of the railway and its value.

To supplement the powers above mentioned, the board has authority to summon witnesses by processes issued to any officer authorized to serve subpoenas, and has the power of a circuit court to compel attendance of such witnesses, and to compel them to testify.

Having secured the reports from the railway, the board has the power to increase or reduce the aggregate valuation of the property of any railroad company. In assessing, adjusting and equalizing any railway property, the state board may arrive at its finding, conclusion and judgment upon its knowledge or such information as may be before it, and is not necessarily governed in its findings, conclusions and judgment by the testimony which is offered.²

"The state board of equalization being composed of persons designated by the constitution of 1875 and the laws, to assess and fix the value of the property in controversy and of all railways and their property, their valuation is conclusive and final, and the courts cannot examine the mode of reasoning or basis adopted by them

² 101 Missouri, p. 120.

58 Missouri, p. 372.

64 Missouri, p. 294.

in ascertaining the value."³ These decisions give the board a free hand, almost unlimited power. If it fails to perform its duty, it is not because it lacks power.

The board, having adjusted and equalized the value of a railway property, must apportion it among the various subdivisions. This apportionment "is based upon the ratio which the number of miles of such road completed in such county shall bear to the whole length of such road." Not all property is apportioned according to this rule.

The property is of two classes, the distributable and the local. The former consists of tracks, depots, water tanks, turntables, engines and cars of every kind and description, and all other movable property.

The latter consists of "all other property of the railway company, real, personal or mixed, including lands, machine and work shops, round houses, warehouses and other buildings, goods, chattels and office furniture of whatever kind." The former is assessed by the state board in the aggregate, so far as value is concerned and distributed for the purposes of taxation to the political or municipal subdivisions, within which the railroad is located, *by the mile*.

The number of miles of the railroad is not to be measured by the length of its main track, or of its main track and side-tracks combined. It is the length of the whole thing,—a railroad, that is to be measured, its length between the terminal points, and in its subdivisions,—and the value apportioned accordingly.

The state auditor sends certified copies of the proceedings of the state board to the railway companies and also to the county courts of the proper counties, setting forth in detail the length of the railroad in the state, and in the

³ State *ex rel vs.* H. & St. J. Ry., 97 Missouri, p. 348. Attorney's petition.

county, city, town, village or municipal township, and the value per mile of road and of rolling stock.

The county court after having ascertained the rate per cent. of the respective taxes on the railroad, and the property thereof in each county, town, etc., at the same rate as is levied on other property for state, county, municipal township, city, incorporated town and village and school purposes, levies the rate on the assessed valuation.

The county clerk must keep a railway tax book, giving in detail not only a description of the property and value per mile in the state and county, and length and value in the various subdivisions, but also the local property of the railway, such as the "lands, machinery and workshops, warehouses and other buildings, goods, chattels, and office furniture," which is assessed by the local officials. The clerk certifies to the railway company the amount and kind of taxes levied in his county.

The taxes are due on the first day of September in the year in which they are levied, and when delinquent they are a prior lien on the railway company's property, which may be seized and sold to satisfy the lien. The taxes are collected by the county collector, and the state taxes paid into the state treasury monthly, and all others into the county treasury and from there distributed.

II. THE PROCEDURE OF THE BOARD.

The only official record of the State Board is its Journal, from which very little can be gleaned as to the methods followed. The Journal records the meetings and adjournments, etc., the fact that Mr. B. appeared before the board in relation to the valuation of the lines of his company. It records none of the evidence or testimony introduced by representatives of the road or others. It gives the final results as to valuation, but does not record

how they were reached. As a result one can obtain from it very little information as to the actual workings of the board.

To reach any conclusions as to the effectiveness of the system, we must have a much closer view into the work than the Journal can give us. In three ways the writer has endeavored to obtain this,—by attendance at the meetings, by personal interviews and correspondence with members or ex-members of the board, and through examination of a typewritten copy of the stenographic report of the proceedings, and testimony, which is prepared for the personal use of each member.

1. Data Before the Board.

It has been shown in what way the data bearing upon the value of a railway may be placed before the State Board. The next step is to ascertain whether such information as may be gleaned from the data seems to be sufficient to enable the board to reach correct conclusions.

The blank sent out by the state auditor calls for three items which may be the bases of the valuation. In the first place, it calls for reports on market value of stocks and bonds on June 1st; but prescribes no method by which this value shall be ascertained. Not considering other objections to the stocks and bonds method of valuation, the failure to prescribe a rule for determining market value vitiates the results from the standpoint of uniformity.

In the second place, the blank calls for "gross, and net earnings of each particular line or branch in and out of the state." So far as gross earnings are concerned, the problems of determination and localization that have been discussed in another chapter arise. When the item of net earnings is introduced the statistics are, as we have seen, of little value.

The third item which might be used, but which in practice is of no value, is the reported "cash value" of the railway.

No report is called for nor description made of the condition of the physical property of the railway. It would seem that the written reports reveal information inadequate as the basis of an appraisement. The reports of the county court serve only as a check upon reports in regard to new depots, new mileage, etc., and in actual service are of little value.

The written reports may be supplemented by the testimony given before the board at its public meetings. This source of information consists, for the most part, of arguments presented by railway officials. For example, during the year 1898, there appeared at these hearings as representatives of railway companies, five railway presidents, one vice-president, five general managers, two superintendents, thirteen tax commissioners, fifteen attorneys, and one chief clerk to the general manager. A committee representing the St. Louis Single Tax League, and the president and a member of the St. Louis Board of Assessors also presented arguments to the Board.

The matter presented to the board by these representatives is of so heterogeneous a character, varying from lamentations on account of washouts to arguments upon some proposed theory of valuation, that it does not lend itself to classification. The one common element is the plea on the part of the railway officers for a reduction of valuation, on the ground that railways were paying more taxes than other property.

A favorite comparison of burden was to assume the value of a railway or any part of it, such as a bridge, to be the cost of reproduction, and to compare the difference between assessed value and cost of reproduction with the difference between assessed and market value of land.

For example, we find one railway claiming that, as land in Holt County is assessed at one-third of its value, a railway bridge located in that county which could be reproduced for \$196,002 should be assessed at one-third of that amount instead of at \$118,750 as assessed by the board.⁴

The facts and arguments presented by a single railway official will vary from year to year according to the interests of the railway, and during the same year will differ in different states. A common practice is to segregate different phases of the industry and to argue from some peculiar condition. Some of the arguments are sane, others senseless.

At one time it is argued that railways should have special consideration because 75 per cent. of their expenditure remains within the state as wages. One official claimed clemency for the railways on the ground that they are "philanthropic institutions," because "they help the poor from city to city,"—they contribute to county fairs, they protect the public by using certain safety appliances, and by increasing the value of land, cause more revenue to come to the state. They call attention to the fact that where, as in Missouri, maximum rates are fixed, it is impossible to increase rates during a period of prosperity to compensate for periods of business depression.

An interesting piece of testimony on the value of public hearings is found in the following statement of a member of the board which assesses railways in Iowa:

"Part and parcel with the lack of method in our railroad assessment is the change from year to year of the arguments adduced for not increasing or changing the assessment of the roads chiefly represented in the council. In 1895 I heard a distinguished judge, who acts as attorney for one system, argue earnestly for 'Gross earnings'

⁴ Pollard, p. 122. (Stenographic Report.)

as 'the only proper basis under the law' for assessing roads. That year the gross earnings of his road had fallen off. Hence his contention. A colleague at that time remarked to me that the next year, if conditions changed, the judge would argue as strenuously for another basis in order to keep down the assessment of his road, as he had changed his tactics nearly every year prior to 1895. The prediction was verified. In 1896 he insisted that 'cost of construction' should determine. The next year he dwelt upon 'geographical distribution.' In 1898 he submitted a celebrated typewritten argument, in which he returned again to 'gross earnings.' The argument in 1899 was that 'value of the property' should be taken as a basis. Each year the new arguments were potent so far as his railroad was concerned, for they prevailed."⁸

In exceptional instances evidence of a character to assist in fixing the value of a railway appears, but, on the whole, it is practically valueless.

2. *The Valuation by the Board.*

With the evidence before the board, three possible ways of determining the valuation of a given railway suggest themselves. (1) They may arrive at the result with mathematical precision by working with the statistics. If so, it is desirable to know what method they follow, whether they reach the results by capitalizing the net earnings, or taking the value of stocks and bonds at par or at market value,—or by what other method. (2) They may let the personal element, their judgment, enter into the determination of the value. If the latter is true, our task would be practically an impossible one, although we might find indications of the method followed in individual cases. (3) They may accept the results secured by preceding boards, and announce the valuations with little change.

⁸ Herriott: *Taxation of Railroads in Iowa*, p. 7.

As has been said, there are three sources of information on these problems, the typewritten copy of testimony and arguments given before the board, personal interviews, and the official Journal.

The official record, the Journal, shows that it has been customary for years to divide the property of the railway companies into classes and then to put a valuation upon these parts separately. Taking one road as a typical example, we find that the Hannibal and St. Joseph Railway was assessed at \$13,000 per mile, while the Cameron branch of the road was assessed at \$16,500, the Atchison branch at \$7000, and the Palmyra branch at \$7000. During the same year, the buildings of all but two railways were assessed at the same amount as for the previous year, as were also the cars belonging to private car companies. Equipment was divided into classes,—locomotives, passenger cars, freight cars, etc.,—and a value assigned to a unit in each class.

The best evidence of the board's failure to arrive at a valuation comes from its own utterance. In 1898 the Attorney General endeavored to have the valuation made as an entirety and tried to persuade the board to accept some distinct method for determining the value of a railway, such as capitalized earnings, the market value of stocks and bonds, or gross earnings.

This endeavor to have some method adopted for determining valuation of an entire property met with the following answer as adopted by the majority of the Board:

"Whereas: All of the State Board of Equalization of Missouri, since their creation of law have uniformly construed this statute to mean that the assessments of railroads be made upon the value of the various properties as they exist in the State of Missouri, now therefore be it

"Resolved, that in the assessment of railroad properties, as far as trackage, buildings and other properties

enumerated in Section 7118 except rolling stock are concerned, this Board will follow the precedent set by its predecessors and sanctioned by long continued usage, assessing each and every railroad company according to the value of the property owned by the company in the State of Missouri, distributing said valuation from one end to the other of each particular line in this state.

"Resolved further, that in order to arrive at an intelligent basis for valuing the several railroad properties, this Board will continue the practice of its predecessors in considering in a general way the cost of construction as modified by changes, the earning capacity, and all other available sources of information."⁶ This evidence negatively proves the lack of system and scientific method in determining the value of a railway.

Not only are the results of the method used by the board subject to criticism, but the method itself can not be justified. A car has little value *per se*, being of value chiefly for the service which it can render, and this service is not determined by the original cost, the cost of reproduction, or the cost minus depreciation. In fact, the system of separating the road into parts for separate valuation is a mere form, an attempt to deceive the public, and a farce.

In the absence of a rule the personal judgment of the members of the board enters into the determination of the value. To what extent they are qualified to form a correct judgment on the value of a railway it would be impossible to state.

A careful examination of the proceedings of the board noting each remark and question of every member fails to show in what manner the members arrived at their judgment. Thirty-two persons appeared before the board in 1898. Of the questions asked them by the board, nine were in regard to comparison of assessment

⁶ *Journal*, p. 34.

in another state, or between two railways, twelve in regard to rolling stock, twelve concerning buildings, seven about stocks and bonds, five on trains, one on earnings, and four miscellaneous. Most of the questions were such as had been answered in the report made to the auditor by the president of the railway. The following is typical:

"How are your taxes in Missouri as compared with other states?"

"You return no chair cars this year?"

"What is your stock quoted at to-day?"

"Are the buildings on the right of way the same as last year?"

"How do you regard the eastern and western divisions as to earnings?"

So far as we may infer from the questions, they were mainly endeavors to confirm the returns already before the board, or to answer some question which was casually raised in the mind of a member.

Interviews with members of the board bring forth the following facts: (1) There is no absolute rule followed by the board for determining the value of the roads. The conclusion naturally follows that it is not arrived at with mathematical precision. (2) The views of the members upon the subject are either vague or they do not care to express them. One member says that the property is valued "on the same basis as other property," and that "they consider the physical condition of the road,—the stock and bonds and earnings," and adds that every man on the board has his own views as to the amount of water in the stock. The members of the board, he says, are "men of affairs, and have general notions of everything," but acknowledge that to arrive at the value is "a very difficult problem." The Governor of the state said, in regard to the assessment of railways, "There is more

guesswork in an assessment than in anything else on earth."

There is no need to dwell on the difficulty of determining the value of the railway property, and the chaos which would follow if it were literally true that every member of the board fixed the value of the property according to his individual judgment. As a matter of fact, the records prove conclusively that the boards follow the valuations set by their predecessors. Here is a typical instance. In 1898 the Wabash Railroad made an investigation of the ratio of taxes to market value paid on lands in the counties in which its line is situated. The officers produced evidence from Ever County, and proved to the satisfaction of the board that the railway was paying a greater rate than the other property, but the board felt compelled for political reasons to ignore these facts, and to follow their predecessors' valuation. In fact, in Missouri, the increase in assessed value was usually in response to political rather than economic conditions. The customary term for the governor of the state is two legal terms of two years each. The records of railway assessments show an increase of total assessed value which corresponds to the changes in the administration. It is customary for each new administration to increase the valuation about ten million dollars. Having made the increase during the first year, only slight changes are usually made at the next three assessments.

To what extent this customary increase has corresponded with the increase in value, it is impossible to estimate in the absence of other valuations covering the same periods.

Other factors which determine the working of the board may be suggested by a glimpse at its membership. Of the twenty-five members on the board from 1876 to 1900, twelve have given their occupation as lawyers,

four as editors or interested in journalistic enterprises, two as bankers, one as a liveryman, six as farmers or not given. But when their careers are investigated, we find that one of the lawyers has held public office for thirty-one years, another for twenty-three years, another for eighteen years, etc. One of the farmers had held public office for twenty-six years. One man had been on the state board for sixteen years, another twelve years, and nineteen for only four years or less. Over half of the twenty-five members had held public office for ten years or more. In other words, the office-holders have been politicians. Their fitness to act as members of a board of assessment of railway property consisted mainly in their political strength and sagacity. Those who are familiar with the history of the railways in their relation to many of our commonwealths, see beneath the forms of procedure and the machinery of the law, the real forces which often direct and control the machinery of the law, when acting on railway property.

Writing of one board of assessment thus controlled, one of the members says, "Having vast resources and an army of shrewd and skilled men at their command, railroads can exert a tremendous influence in primaries, conventions, and elections. They get one candidate for public office, and promote their—(his)—candidacy with vigor and marked efficiency. To show to what extent this is true, I need but to call attention to the fact that it is customary for the press and people to refer to this and that member of the executive council as, a "Northwestern man," a "Milwaukee man"; this aspirant for office is the "Q" candidate, that one is a "Rock-Island" or "Illinois Central" man. So valuable are the services of members of the council who are willing to represent and protect

railroads in the assessment that the campaign expenses of candidates are sometimes supplied them."⁷

The student of industrial history often lacks the evidence which is in the hands of the man of affairs, yet a good case may be made against undue favoritism by careful statistical investigations of the results of assessments. This problem of undue influence in assessment is a practical one which every system must meet, and one which cannot be overlooked by the historian or the theorist. A system may be theoretically correct, and provision made for a well-ordered administration; yet if it is not constructed in the light of the probable influence of the powers that be, it will not be effective.

We believe that the Board system as now operated in many of the states is open to just this criticism.

3. *The Experience of Other States.*

Not only in Missouri and Iowa does the State Board system break down its administration, but sooner or later wherever it is adopted. Pressure from the outside, sometimes from the railways, sometimes from the people, governs the appraisal. In some states it is the purpose to demand all the railway will or can pay; in others it is the policy of the board to assess the railways as low as possible, without bringing down an avalanche of agitation.

The Michigan Tax Commission, after making an extended investigation of taxation of railways in this country, reports that "Three-fourths of all the states value railroads, telegraphs, telephone, and express companies by some state board." A brief reference to the abstract of methods and results printed in this report will convince that a wide diversity is shown in the matter of opinion

⁷ John Herriott: *Taxation of Railways in Iowa*, p. 6.

and judgment, if the cause of such diversity deserves so charitable an expression.

"It has come to be a very common practice in many other states, if reports be true, to appoint on such boards men who are satisfactory to the great corporations who contribute to the campaign expenses and control political conventions. A man who does not receive such indorsement is not considered for appointment to administrative office over their affairs. Ability, integrity and merit do not count without such indorsement. It has become an iron-clad fact, not only in other states, but in Michigan as well, that farmers, merchants, men of other industries, and laborers, will accept such administration of government as comes to them with little or no organized complaint. They are not associated along the special line of their interests, while the great corporations, fewer in numbers, and more powerful in resources, are always on hand, often ready to protect and defend their just interests and frequently to gather fruit from other trees than their own by indirect methods.

* * * * *

"It is but nonsense to talk of placing the valuation of these immense properties worth hundreds of millions, in the hands of men, for valuation, with whom it would be a physical impossibility to make even an approximate valuation. If railroad and other like corporations are to be assessed upon valuations, only men capable of doing this work by training and experience can find even approximate values, and this should be done so openly that not the faintest suspicion may attach to the assessing board or to the corporations themselves. Any private office valuation would lead to grave charges. . . . It may be said that after a careful study and examination of the plans and methods pursued in all these states and the results accomplished, that no one of them seemed to

offer a fair or satisfactory solution of the problem before the commission."⁸

When Michigan abandoned the tax on gross earnings for a tax *ad valorem*, the assessment being made by a state board, it was interesting to note how soon the private office valuation came into existence. One of the board, a member of the former tax commission, quoted above, when asked how valuation was determined, said, "When it comes to a question of the ultimate valuation of railways, each member of the board has his own opinion."⁹ An investigation of Michigan procedure shows "an aggregate and final valuation simply placed upon each railroad system by a method which, however conscientious on the part of the assessors, neither the railway nor the public is permitted to discover." The board frankly admits that "were they to reveal the grounds of their valuation, they would simply invite endless criticism and objection on the part of the railways and other corporations which they are required by law to assess."¹⁰

The Ontario Commission, in their tour of investigation, made a thorough study of the actual operations of the *ad valorem* system, and found conditions similar to those in Michigan existing in all the states studied.

In determining the value of a road under the State Board system no more account is taken of the cost of construction than in the case of the gross earnings system. In Indiana the Tax Commissioner, "in reply to the question as to how two roads would be assessed, doing an equal business and having an equal income, but one having cost twice as much to build as the other," said, "If the earnings are just the same and each road is of the

⁸ Michigan Tax Commission Report, 1900, pp. 63, 67.

⁹ Ontario Commission Report, p. 47.

¹⁰ Ontario Commission Report, p. 48.

same value after it is built, it is not a question with us what it cost to build." ¹¹

From the standpoint of administration the problems connected with the *ad valorem* system are more complex and more insidious than those that are met in the gross earnings system.

III. THE RESULTS OF THE SYSTEM.

In the light of these indefinite and indeterminate methods amounting to lack of method in estimating value, it is not surprising to find in the results of the appraisal a lack of uniformity, or conformation to any standard. The first result is the unequal distribution of burden among the railways. Where the personal judgment of the appraiser, or the pressure of political conditions enters in, this is found; in fact, it appears to more or less extent in all states where the system is followed, and is so generally known that only a few typical instances will be cited.¹²

From information laid before the state board of Missouri by one of its members, the inequalities in assessment are made evident. In 1897 the assessed value of eleven of the most important railways in Missouri was \$60,310,262.15. The market value of that portion of

¹¹ Quoted by Ontario Tax Commission Report, p. 61.

¹² For investigations showing inequalities among roads, see McCreas: *Taxation of Transportation Companies*, p. 1018 *et seq.*

E. W. Bemis: *True Value of Ohio Railways*.

State Treasurer John Herriott: *Speeches and Pamphlets on Taxation of Railways in Iowa*, 1900.

Attorney-General Crow: *Resolutions offered to the State Board of Equalization and Assessment of Missouri*.

Report of the Ontario Commission on Railway Taxation.

Ohio Tax Commission, 1893, p. 58.

Arguments of railway officials before the boards appear in daily papers also, at the time of the public hearings.

these roads to be found in Missouri, as determined by the market price of their securities was \$157,497,811; as determined by the capitalization of their net earnings it was \$157,547,721.49. Taking the lowest valuation in the case of each road and making allowance for local taxation, the per cent. of market value or net earnings value to assessed value ranged from 27.80% to 70.99%.¹³

Of Iowa, where a system similar to that in Missouri is followed, the State Treasurer, speaking in 1904, says, "The streets of your city (Marshalltown) are crossed by four trunk lines. Take their assessments first as measured by their gross earnings taken for taxation. The C. and N. W. this year pays \$2.40 on every \$100 received, the C. M. and Sa. P. \$2.50, the C. G. W. \$2.60, and the Iowa Central \$2.90. On the basis of net earnings the incongruities are just as marked. The council requires the C. and N. W. to pay \$7.60 out of every \$100 earned net, the C. M. and St. P. \$8.00, the Iowa Central \$7.70, and the C. G. W. \$12.90 of its net income. When it is considered that the total earnings of our great railway systems in the state get up into the millions, the pecuniary advantages to the ones most favored aggregate enormous sums. The case is no more satisfactory if we measure the railroads on the basis of their stocks and bonds. On the day on which the roads were assessed in 1900 the common stock of the Northwestern sold at 163 in New York, and that of the Great Western at only \$13 and seven-eighths, yet the latter was assessed at \$4.760 per mile and the former at only \$6.049. When the smaller and weaker railways are examined, the difference is more striking. For example, for \$100 of gross earnings, the Marshalltown and Dakota was assessed at \$315, the

¹³ Compiled by Attorney-General Crow. Report of the Missouri Board of Equalization and Assessment. 1898.

Crooked Creek on \$233, and the Muscatine North and South on \$211, while of the trunk lines, the Rock Island, for every \$100 of gross earnings was assessed at \$108, the C. M. and St. P. at \$80, and the Northwestern at \$72.¹⁴

"Very serious are the unjust inequalities in the tax burden borne by Iowa railroads on account of the lack of system or definite and impartial procedure on the part of the executive council in assessing railroad property for taxation. The inequalities have existed for years. The weakest and smallest roads are assessed at excessively high rates compared with the trunk lines, and the strongest and richest railway system of the state is assessed at the lowest rate. There is no sense, no system, no justice in the assessments of railways in Iowa."¹⁵

These inequalities, far from being the exceptions, are the factors which make the rule of valuation. This rule is not an economic standard of valuation. Such a standard is lacking in most states where the *ad valorem* system is in vogue. Furthermore, this lack of a standard of valuation appears not only when individual roads are considered, but also when all roads within a state are considered as one system, as may be seen by comparison with other valuations.

The most thoroughly wrought out comparison of assessed value is found in the work of the United States Census Bureau, where income from operation is used as the basis of the commercial valuation.¹⁶

In those states where the assessment of railways is made by a state board the assessed value falls far below the commercial value as determined by the Census Bureau. In Missouri it is only 31.6 %, in Iowa 16.7 %,

¹⁴ See Herriott: *Taxation of Railroads in Iowa*.

¹⁵ *Ibid.*, p. 5.

¹⁶ See *supra*, p. 72.

in Kansas 16.9 %, in Ohio 19.4 % of the commercial value. Where the *ad valorem* system has been recently adopted under popular pressure for heavier taxation of railways, the ratio of assessed to commercial value is considerably higher; in Wisconsin, for example, it is 76.6 % and in Michigan 70.9 %.¹⁷

In the latter state we also find a high ratio between the assessed and other valuations. In 1903 the assessed value of all the railways in the state was \$198,000, or 98 % of the valuation made by Professors Adams and Cooley in 1902. It was greater than the valuation made by Tax Commissioner Oakman, who arrived at his conclusion by capitalizing net earnings.¹⁸

It may be said that while on the one hand, it is possible to apply the *ad valorem* method so that the assessed value will approach market value, as has been done in Michigan, on the other hand, in those states where the system has been in operation for a decade or more, the railways are not and never have been assessed at a figure which approaches market value. Knowing the methods by which assessed value is determined, we may conclude that the variations in so many instances from other standards of value seem to indicate that assessed value can not be accepted as a criterion of value¹⁹ by which to measure the effectiveness and equity of a tax on gross earnings, as assessed value is a more uncertain quantity than gross earnings.

Moreover, the inequalities in the *ad valorem* system

¹⁷ Commercial Valuation of Railways, p. 14.

¹⁸ Statistics from Report of Michigan Tax Commission, 1900.

¹⁹ This conclusion is further sustained by an examination of the variations in assessed value of individual roads operating through contiguous territory. Typical conditions are illustrated by those pointed out by Professor Edward Bemis in "The True Value of Railways in Ohio."

are especially insidious and dangerous.²⁰ They are not due to some circumstance within the industry, as in the gross earnings tax, but are forced from the outside and to a great extent are due to political causes.

²⁰ For example, the State Treasurer of Iowa points out that "The officials of our State favor certain railroads in assessment for taxation. Other roads compared with them are overtaxed in consequence. The first and natural result of such favoritism is to invite railroads to 'take a hand' in politics to obtain favors. The strongest political roads gain them, of course. . . . This forces all competing lines to take part in politics to protect themselves. A few years since, the Milwaukee system was regularly overtaxed, compared with other trunk lines. Now it is not. It has become powerful in politics. Several railroads might be mentioned that have been forced, contrary to the desire of their management, to enter into politics because of the pernicious activity and power of some trunk lines." Herriott: *Taxation of Railways in Iowa*. 1900.

CHAPTER VII.

FISCAL CONSIDERATIONS: EQUITY.

It is difficult and not altogether profitable to consider certain phases of a tax law apart from the system in which they have developed. Such questions as the relative amount of revenue produced by different taxes, and the relative amount of burden borne by different classes of property are to a more or less extent so modified by local conditions that a comparative study has many limitations. As these, however, are questions which may not be ignored in considering a fiscal measure, the more important phases of these problems connected with a tax on gross earnings will be pointed out.

A vital question in regard to every fiscal measure is whether it is a good revenue producer. In Wisconsin the tax on the gross receipts of railways furnished, from 1889 to 1901, 38 % of the total state revenue. In 1889 it was the source of 37.3 % of the whole, and in 1901 of 37.8 %.¹ During this period the railways were not sub-

It is impossible to say what amount of revenue would have been produced if a different method of taxing railways had been employed; but if a comparison is made of the average tax per mile where the railways operated in Wisconsin are subject to a tax *ad valorem* in neighboring states, the results are favorable to the gross earnings system.² Too much reliance should not be placed on

¹ Report of Wisconsin Tax Commission, 1903, pp. 214, 328.
ject to local taxation.

TABLE NO. IX.⁸

Ad Valorem and Gross Earnings.

TAX PER MILE ON INDIVIDUAL RAILWAYS IN SEVERAL STATES.

Average Tax per Mile.

Road	Year	Tax Ad Valorem Ill.	Ad Valorem Mo.	Neb.	Tax on Gross Earnings Ia.	Minn.	Wis.
C., B. & Q	1904	351	183	206	227	500	387
	1903	328	191	191	194	524	346
	1902	337	158	189	180	367	275
	1901	363	141	186	176	294	246
C., M. & St. P.	1904	352	237		193	241	354
	1903	385	208		149	248	339
	1902	428	179		148	214	311
	1901	421	140		146	219	316
C. & N. W.	1904	460		184	250	550	348
	1903	453		151	209	163	337
	1902	400		128	179	124	321
	1901	505			176	122	320

such comparisons, on account of the differences in the tax systems employed in the several states.

As compared with the *ad valorem* tax law system recently adopted in both Wisconsin and Michigan, the tax on gross earnings at the rates of the old laws is not so productive. The fault, however, was not in the system but in the rates, which could have been so adjusted as to give an equal amount of revenue. We have seen that where the *ad valorem* system has been in force for a number of years its increased productiveness was due, not to economic but to political causes. On the other hand, while the gross receipts system has periodically responded to popular pressure for an increase in rates, it has also automatically adjusted itself to increase in ability.³ As

³ This automatic adjustment gave rise to some arguments against the system on the ground that the fluctuations in gross earnings made a heavier rate on other property necessary. These are not of great weight, for in Wisconsin only once during the past fifteen years have the receipts from railway taxes been over \$100,000 less than the receipts of previous years. At three times a smaller decrease has occurred, but with total State receipts of over \$4,000,000 such fluctuations are of little moment. Wisconsin Tax Commission Report, 1903, p. 215.

a revenue producer, therefore, the gross earnings system *per se* is efficient.

The question of the comparative burden borne by different classes of property is the maelstrom of tax reform agitation. The most fundamental and popular theory connected with our general property tax systems is the doctrine of equality. Inequality is the starting point and equality the goal of these agitations. Especially is this true of movements for an increase in the amount of taxes paid by railways. For example, the late Governor Pingree made his political fight in Michigan with "equal taxation" as his motto, and Governor La Follette in Wisconsin made it the chief plank in his platform. In both states this demand for equality led to the abandonment of the tax on gross earnings.

The first results of these agitations were painstaking and thorough attempts to ascertain the workings of the existing tax system. In Michigan it resulted in the most thorough appraisal of railway property ever made in this country; in Wisconsin, in a thorough attempt to appraise the general property of the state. These important results will be studied in more detail.

I. THE APPRAISAL OF THE RAILWAYS IN MICHIGAN.

The appraisal of the value of the physical properties of the railways in Michigan was made under the direction of Mortimer E. Cooley, Professor of Mechanical Engineering at the University of Michigan. Only a superficial description of the engineering work can be given in this place. Professor Cooley divided his force of about seventy-five engineers into office and field men, and the work into civil and mechanical engineering. The office men prepared from the records in the railway offices, facts relating to surveys, right of way and station

grounds, real estate, grading, tunnels, bridges, trestles, and culverts, rails, fencing, station buildings and fixtures, shops, roundhouses and turntables, water and fuel stations, grain elevators, warehouses, docks and wharves, and miscellaneous structures. This information was placed in the hands of field engineers who proceeded either on foot or by hand car to verify or correct every item. The data thus verified corresponded to those which would have been obtained by actual surveys.

In computing the cost, the office force used a set of carefully wrought-out tables which showed the price of different elements entering into cost of construction. In compiling the accounts, the "classification of construction accounts" prescribed by the Inter-State Commerce Commission was followed.

In estimating the value of the right of way, station grounds and real estate, the question arose whether the railways should be charged for what the right of way actually cost—it having been ascertained that they paid from 100 to 125 % higher than the value of adjacent property—or for what it was worth for other purposes before it was purchased. "The conclusion finally reached was to add to the value of the right of way as determined by contiguous property an amount fairly representing the actual cost to the railroad."

"Under the head of mechanical engineering a careful inventory and inspection was made of all shop machinery and tools, locomotives, passenger and freight, and miscellaneous equipment and of stores and supplies. The work was thoroughly done and included practically every locomotive and passenger car belonging to Michigan roads."

In order that there might be no question of the suitability of the method employed, a Board of Review composed of prominent engineers was appointed. Their

advice was especially sought on such questions as the percentage to be added for items of engineering, legal expenses, interest and discount, organization and contingencies.

To complement the appraisal of the physical properties, Professor Henry Carter Adams made an estimate of the value of the railways, based upon net earnings. The chief elements in the railway industry which made it necessary to thus supplement the appraisal value (Professor Adams' analysis) are substantially as follows:

1st. The formal value of a franchise, that is, the right to be and act as a corporation.

2nd. The possession of traffic not subject to competition which permits a return above a just and reasonable rate (the margin of surplus earnings thus rendered possible becomes the basis of a surplus value, that is, a value in excess of the inventory value of physical elements).

3rd. The possession of traffic held by established connections, amalgamations and consolidations, and not subject to competition.

4th. The benefit of economies made possible by the increased density of traffic. That is, the growth of population, and the consequent increase of traffic, which results from the growth force a value into the treasuries of the railway corporations which cannot be credited to the superior ability of those by whom railways are administered. Were this business exposed to the influence of competition, the value in question would be dissipated to the public through a reduction in the price of service. For many reasons, however, this is not possible in the case of the business of transportation and the value resulting from economies rendered possible by the increase in traffic comes into the possession of the corporations rendering the service.

5th. The intangible value of a railway corporation includes a value arising on account of the organization and vitality of the industry which renders the service.

In commenting on his work, Professor Adams said: "The theory upon which the computation of intangible value rests is that all property assigned to a productive purpose secures its value from the fact that it is the source of current income." To determine the unmaterial values of railway properties Professor Adams laid down the following rules:

1. Begin with gross earnings from operation, deduct therefrom the aggregate of operating expenses, and the remainder may be termed the 'income from operation.' To this should be added 'income of corporate investments,' giving a sum which may be termed 'total income,' and which represents the amount at the disposal of the corporation for the support of its capital and for the determination of its annual surplus.

2. Deduct from the above amount—that is to say, 'total income'—as an annuity properly chargeable to capital, a certain per cent. on the appraised value of the physical properties.

3. From this should be deducted rents paid for the lease of property operated and permanent improvements charged directly to income. The remainder would represent the surplus from the gross earnings from the year's operations, and for the purpose of this investigation may be accepted as an annuity which, capitalized at a certain rate of interest, gives the true value of immaterial properties.

* * * * *

7. To obviate the criticism that both gross and net earnings vary from year to year, it is suggested that, in place of a single year's income account, a period of ten years be accepted as the basis of computation.

8. It will be observed that the above fails to appraise the speculative element in railway property."

The Cooley-Adams appraisals estimated the value of the railways at \$202,716,262. The average rate of the general property tax, levied on this value, produced an amount almost double that of the taxes paid under the gross earnings system. The result was an increased de-

mand that railways be taxed according to their value. In compliance with this demand, the *ad valorem* method was substituted for the tax on gross earnings.

II. THE APPRAISAL OF PROPERTY IN WISCONSIN.

In Wisconsin a similar movement for "equality" resulted in several thorough investigations of the tax system, with a view to ascertaining the relative burden borne by the different classes of property.

The most thorough investigation was made by a tax commission consisting of a tax commissioner and two assistants appointed by the governor, with the consent of the senate, for a term of ten years.⁴ The commission was not limited in expenditure, and had ample powers to secure whatever information it desired from individuals, from corporations, and from officials, both state and local. At the same time that the tax commission was pursuing its work, two independent investigations were being carried on, one by the governor, and the other by the railway authorities. The results of these inquiries came before the legislature during the session of 1900-1901.

1. *Value of the Railways.* To determine the relative burden borne by railway and other property, it was necessary to determine the true value (as contradistinguished from merely assessed value) of all taxable property in the state and to ascertain the rate paid on each class of property. In the investigations made to establish the true value of the taxable property in the state, property was divided into three classes: railway, real and personal property.⁵

For the purpose of determining the value of railways, the commission divided them into two classes. The first

⁴The first commission, without power, was appointed in 1897; the second, with power, in 1898-9.

⁵That this classification as carried out was not all inclusive will be pointed out later.

class included those railways whose securities were quoted on the market. For these, the commission accepted the market price of the stocks and bonds as indicative of the true value of the property, including franchises. They took the market prices of the stocks and bonds of all railways operating within the state whose securities were quoted, using the highest and lowest in each month, as quoted on exchanges, for periods of one, three, and five years. The fourteen railways which were valued by this method had a mileage of 5885.79; their cost as reported by the companies was \$233,682,366.91 (this includes road and equipments); the par value of stocks and bonds was \$246,972,968; the gross earnings for 1900, \$40,539,014; the net earnings, \$15,289,200; the taxes paid, \$1,537,070.47.⁶ The average value as found by the commission for one year, 1899, was \$249,151,149; and the average value for five years was \$215,277,187.⁷

For the second class of roads, consisting of those whose securities were not quoted on the market, the value was found by capitalizing the net earnings at six per cent. They had a mileage of 629 miles; gross earnings amounting to \$784,381; net earnings amounting to \$194,330; and paid as taxes \$10,147.77.⁸ Their average value for five years was found to be \$2,718,531.⁷

The average value for five years of railways of both classes, as given by the commission, was \$217,995,718,⁷ or 18.95 per cent. of the gross earnings for the year 1900. The taxes paid in 1900 were \$1,547,222.18, or 7.09 mills on the dollar of the above valuation. General property in 1899 paid 11.545 mills on the dollar.⁹

⁶ Report of 1901, p. 97. Owing to criticism, the number of railways thus valued was reduced to eight in 1903.

⁷ *Ibid.*, p. 106.

⁸ *Ibid.*, p. 100.

⁹ *Ibid.*, p. 107.

In 1902, after a more careful research, the commission reports an average value for five years of \$231,011,385.

After having established a value for the railways, based upon the value of their stocks and bonds, the commission found an average yearly income from operation, during a period of five years, to be \$15,146,031.77. This they capitalized at 6 per cent., securing a valuation of \$252,433,861.

Having found the rate of taxation throughout the state (based on the valuation of general property plus railway property divided by the total taxes plus the license fee), the commissioners applied it to the appraised average valuation of railways during the period from 1895 to 1901, and found that the average yearly tax would have been \$2,652,590.62. The largest sum derived from the railway license fees for one year during the same period was \$1,711,900.18.

The valuation of the railway property was ascertained principally by means of the market values of the stocks and bonds. The conclusions of the tax commission depend upon the validity of their estimates. These were attacked by the railway representatives. It was pointed out that the Chicago, Madison and Northern Railroad Company was included by the commission among roads whose value was ascertained from the market quotations of their securities, whereas no stocks or bonds of the C., M. & N. R. R. Company had been in the market during the five years included in the estimate.¹⁰ It was brought out that the securities of the Chicago, Madison and Northern Railroad Company were pledged to secure bonds of

¹⁰ See affidavit of Mr. J. C. Welling, Vice-President of C., M. & N. R. R. Co. in "Railway Taxation in Wisconsin." Judge J. M. Dickenson's (General Solicitor of Illinois Central Railroad Company) argument before the joint committee of the Wisconsin Legislature, March 5th, 1901.

the Illinois Central Railroad Company, and that to determine the value of the Chicago, Madison and Northern Company, the tax commission had applied the "market value of the Illinois Central" to the securities of the Chicago, Madison and Northern Railroad. On this point the representatives of the Chicago, Madison and Northern Railroad Company said: "The Chicago, Madison and Northern Railroad is a small road valued in the fifth class of Wisconsin roads. The Illinois Central Railroad Company is a large corporation having established credit in both America and Europe. It is fantastic to assert that the value of its stocks and bonds are in any way exponents of the value of the railroad of the Chicago, Madison and Northern Railroad Company."¹¹ Attention was also called to the fact that the commission estimated the value of the roads in the second class from the net earnings, which were \$194,330, but disregarded the deficit from operation, which was \$192,975.35, for the same class.¹² The chief objection of the railway attorneys was against using the market value of the securities as the sole basis of valuation of the railways.¹³

¹¹ See Dickenson, p. 25.

¹² The tax commission say that the interest on the bonds was included in operating expenses of some of the roads, and that the deficit, as such, was not reliable.

¹³ These objections are well summed up by Judge J. M. Dickenson (General Solicitor of the Illinois Central) who says:

"Weight should be given to the market value of the stocks and bonds. But in ascertaining the market value of the stock and bonds it should be borne in mind that—

The value of such securities includes and covers property of the company, which cannot be taxed in Wisconsin;

That quotations, ordinarily called 'Market' reports, may not be so much the result of the careful investments of farsighted men as of the manipulations of speculators on margins;

That these quotations are often forced by stock exchange practices;

That management, good will and business standing are all cov-

The representatives of the railways did not place a valuation on the railway property in the state. There were, however, two other estimates, one which fixed a value by means of capitalized earnings, the other by the market value of stocks and bonds. At Governor La Follette's request, the State Commissioner of Statistics estimated the assessed value of railways at \$51,390,269, by capitalizing the taxes paid, at the average rate applied to other property. The market value, \$256,393,310, he found by the stocks and bonds method.¹⁴ The per cent. of assessed value to market value was, according to the above figures, 20.05 per cent. The investigations carried out by the tax commission and by the governor would seem to indicate that railways were paying taxes on less than 20 per cent. of market value, or between 5.2 and 7.09 mills¹⁵ on the dollar of "true cash value."

2. *Value of Real Property.* It is generally acknowledged in Wisconsin that real and personal property are not assessed at their market value. In order to ascertain the relation between the assessed and market values of real and personal property, the governor, the tax commission and representatives of certain railways made in-

ered by share stock values, and an assessment based on such values taxes property to corporations which is not taxed to natural persons at all;

That hope of the future is an element which inflates the market value of stocks and bonds above the true value of the property.

That the power of 'control' or the possession of the majority stock, gives a 'market' value to a portion of the shares beyond the real value of a like proportion of the property;

That where a railroad originated under a separate charter, but is now a link in an interstate railroad system, its bonds and stocks may have a high value, solely because the consolidated company stands as a guarantor of interest and dividends." Dickenson, pp. 40-43.

¹⁴ Governor La Follette: *Inaugural Message*, 1901, p. 14.

¹⁵ 5.2 according to Governor's valuation; 7.09 according to Tax Commissioner's valuation.

vestigations. It was necessary to establish a percentage relation between assessed and market value of taxable property before a comparison of the relative amount of taxes borne by different classes of property could be made. Therefore, the governor, or rather the State Statistician under the direction of the governor, compiled a table, which is given below, showing the assessed and the market values of railway, real and personal property.¹⁶

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TABLE NO. X.
GOVERNOR LA FOLLETTE'S VALUATION.

Classification of property.	Assessed value.	Market value 1890	Percent- age of ass. need to market value.	Taxes paid.	Per cent of market value paid as tax.
Real property	\$519,713,082	\$1,138,377,000	44.90	\$13,730,820	1.19
Personal " " "	111,008,415	862,500,000	12.90	2,932,842	.34
Railway " " "	51,390,269	256,393,310	20.05	1,357,731	.53
Total	\$682,111,766	\$2,257,770,610	29.80	\$18,021,393	.80

To ascertain the market value of real property in the State, all recorded sales of real property, between September, 1891, and September, 1899, were compared with the assessed value of the same property and the percentage relation found. This percentage was applied to all real property, and the result was taken as the market value of real property. For the purpose of testing the facts found by this method, two other investigations were made. One of these consisted in personal inquiries as to the value and assessment of representative farms in sixteen counties, and of business and residence property in thirteen cities. The other was an effort to obtain through correspondence information on a large scale regarding all assessable property. Both proved satisfactory, and practically the same results were obtained as under the first method.

The results of the investigation made by the governor,

as given in Table No. X, show that the market value of the real property of the state was \$1,138,377,000, and the assessed value \$519,713,082, or 49.9 per cent. of market value. The taxes paid on the real property were \$13,730,820, or one and nineteen-hundredths per cent. of market value, while railways paid \$1,357,731 on a market value of \$256,393,310, or only fifty-three-hundredths of one per cent. of market value. Real property paid on each dollar of market value over twice as much as did railway property.

The report of the tax commission differs little from the report of the governor.¹⁷ The commission ascertained the sales of real property for five years and the assessed value for the same period, and from this computed the ratio of assessed value to selling price. This process was carried out for the 1300 assessment districts, and the ratio computed on a basis of five years' sales and assessments, during which time they ascertained 82,519 bona fide sales of acres of property, and 40,607 bona fide sales of city and village lots. The total actual value of real estate in the state as found by the above method was \$1,192,867,499. The total average assessed valuation compiled from reports of the Secretary of State, was \$518,824,553, and from these two sums the commission found the average assessed value to be 43.4 per cent. of the aggregate market value. These results were verified by the answers of local officials and farmers to the inquiries made by the commission concerning the ratio of assessed to market value. The governor's results differed very little from the results found by the tax commissions, as he had estimated the per cent. of assessed valuation to market value at 44.9. The method was certainly a very scientific and thorough one, and the results can be relied

¹⁷ Report, 1901, p. 44 *et seq.*

upon. It would seem, then, that from 43.4 per cent. to 44.9 per cent., the tax commission's and the governor's estimates respectively, may be taken as approximating the true relation between assessed valuation and market value of real property in Wisconsin.

The Chicago and North Western Railway Company and the Chicago, Milwaukee and St. Paul Railway Company co-operated in conducting an investigation of the rate of assessed to real value of all property (except rail-ways) in Wisconsin.

"Twenty-two different counties in the State were selected, which in the aggregate are believed to represent all the varying peculiarities of the property, industry and business of the state. . . . Expert real estate men canvassed each town in these several counties. A large number of pieces of property, including descriptions of improved and unimproved lands, and town and city property, were considered."¹⁸

The results of the railway officials' investigation show that real property was assessed at 35.7 per cent. of its market value.¹⁹

The results of the governor's inquiries confirmed his calculation that real property was assessed at 44.9 per cent. of market value. Twenty-two hundred and twenty town and county officials, replying to the tax commis-sioner's inquiries as to the ratio of assessed to market value, gave an average of 45.9 per cent., and the replies of 1667 farmers gave an average of 48 per cent. The inquiries of the tax commission, the governor, and the railway officials may be put into the same category, but the results found by both the tax commission and the

¹⁸ Printed argument submitted to Wisconsin Tax Commissioner by Mr. E. P. Crandon, Tax Commissioner of C. & N. W., p. 12.

¹⁹ The data collected by the Tax Commission showed a five-year average ratio of assessed to true value of real estate in the same counties to be 38 per cent. Report, 1900, p. 62.

governor on the more scientific method of comparison of sales and assessed value were not refuted by the railway officials and can be accepted as approximating the truth.

Having the relation of assessed to market value of both railway and real property and the taxes paid, a comparison of the relative burden may be made. If the tax commission's valuation by the stock and bond method be accepted, the railways were paying taxes on 18.95 per cent. of their assessed value; or, according to the governor's figures, on 20.05 per cent.; while real property, according to the tax commissioner, was paying on 43.4 per cent. of market value; according to the governor on 44.9; and according to the railway officials, on 35.7 per cent. of market value.

3. *Personal Property.* The valuation of personal property was a much more difficult task than the valuation of real property. The intangible nature alone of a great part of personal property made it impossible to arrive at sound conclusions as to the relation between the assessed and market value. Nevertheless the conclusions reached played an important part in the discussions before the legislature in 1900-1901. Governor La Follette says that his statistics for personal property were obtained by the following means:

"A circular letter requesting information concerning the per cent. relation which the assessed value of the different kinds of personal property bore to the market value was directed to the assessors, town, village, city and county officials, and besides these to such other persons in the different parts of the State as we had reason to believe were familiar with tax matters. About one-half, or nearly 4500, of these inquiries were answered. These answers were carefully examined, compared and compiled. The facts obtained from them before accepted or used were also fully considered, not only in connection with the probable increase in property since 1890, but in

every other connection that was thought to have some bearing upon their accuracy. The true value of intangible personal property or mortgages, notes, stocks, bonds, etc., for 1899 was placed at \$275,000,000.”²⁰

By this method the market value of personal property tangible and intangible was estimated as being \$862,500,000; the assessed value, \$111,008,415, or 12.0 per cent. of market value. The taxes on personal property paid as taxes thirty-four one-hundredths of one per cent. on each dollar of market value; real property paid one and nineteen one-hundredths per cent. on market value; and railway property paid fifty-three one-hundredths of one per cent. on market value.

The tax commission’s investigation of the personal property in the state was no more satisfactory than was that of the governor. The tax commission, however, did realize the futility of attempting to find the amount of personal property in the state, and limited their investigation to ascertaining the market value of the assessed personal property. This they only estimated by applying to personal property the ratio of assessed to market value as found for real property.²¹

The railway counsel vigorously objected to the results found by the above method. They claimed that it was generally acknowledged that the value of personal property in the state was equal to the value of real property; and that the method followed by the tax commission ignored the greater part of personal property, namely that which escaped assessment, and that it therefore could lead only to erroneous results.

Judge Gilson of the commission argued in reply to the claim that personal property in a large degree escapes taxation:

²⁰ Inaugural Message, 1901, p. 14.

²¹ Report, 1901, p. 65.

"That there was a great question whether it should be assessed at all. Personal property consisted of stocks, bonds, notes, mortgages, and credits, and of this class of holdings the railroads had some \$250,000,000, and if they wanted that assesed they would bring upon themselves double taxation. As for taxing mortgages, notes and bank deposits, the judge said, experience had shown that neither the public nor the money lenders would accept a system that tended to cut in upon the rate of interest. But personal property or no personal property, so long as tangible holdings were taxed, then all visible property should be equitably assessed."²²

Mr. F. E. Crandon (tax commissioner of the Chicago and North Western Railway), in commenting on the estimation of the value of personal property in the state, said:

"It was found to be much more difficult to procure information concerning personal property values, than those of real estate. In the farming communities only a portion of the personal property was assessed at all. Much of the live stock, nearly all of the farming utensils except wagons, generally such farm products as remained on hand, and other forms of personal property were omitted from the rolls entirely. In towns and cities the personal property assessment is farcical. The values placed upon the merchandise, manufacturers' materials, and products, moneys, credits, securities of all kinds and other personal property items are ridiculously low when they are listed at all, and for the most part no attempt is made to find or assess such property."²³

Counsel for the railways claimed that railways were bearing a greater burden than intangible personal property, and therefore there should be an equalization of burden before the rate on railway property was raised.

In arguing on the above point the railway representatives used the statistics given by the governor. These

²² Report of Judge Gilson's speech before joint committee, *Madison Democrat*, March 8th, 1901.

²³ Crandon: *Railway Taxation in Wisconsin*, pp. 13, 14.

statistics would not, however, justify the conclusion that railway taxes should not be increased. They show that though railway property was assessed at 20.05 per cent. of the market value, real and personal property together were assessed at an average rate of 28.9 per cent. Even assuming the low estimate on personality, the burden borne by the railway property was relatively less than that borne by other property. The railway officials estimated that the assessed value of personal property was about 10 per cent. of the market value. These estimates can be placed in the same category as those of the governor, though not given as much weight for the method used in arriving at their conclusions. Both the governor's and the railway statistics in regard to personal property are little better than guesses, and guesses, as Mr. Crandon said, are not very reliable, "however expert the guesser may be."

4. *Corporate Property.* It should be pointed out that there was one source of revenue which was ignored by the governor and the railway officials in their discussions on the equalization of taxation, and which was barely mentioned by the tax commission.²⁴ This source consists of various corporate properties and franchises which are subject to taxation by the state.

In Wisconsin, besides the general property tax, there has grown up to meet modern industrial conditions a species of franchise taxes called the "license fee system." By means of this system the state secures revenue from street railways; electric light and power plants operated in connection with street railways; telegraph and telephone systems; plank and toll roads; boom and dam com-

²⁴ Report, 1901, p. 64. The Tax Commission says that the personal property of corporations taxed under the license fee law should be considered but not included when arriving at the value of personal property in the State.

panies; foreign and domestic life, fire, and navigation insurance companies; title guarantee, trust and annuity companies. Besides the "license fee system," there are special *ad valorem* taxes, upon sleeping cars, freight line and equipment companies. The property taxed by means of the "license fee system" forms no small portion of the property in the state, and it should have received due attention in the several investigations when the comparative burden of taxes was being considered.

After making allowance for errors in the appraised value of the property in the state, there still remained a difference between the burdens borne by real estate and by railway property, great enough to convince the people that the railways were not paying taxes at the same rate as other property. This led to the abandonment of the "license fee" system in 1903, and brought the railways under the general property tax system.

III. EQUALITY VERSUS SOCIAL UTILITY.

While it was undoubtedly true that the railways could bear a greater proportion of the burden of taxation in both Michigan and Wisconsin the grounds upon which the tax on gross receipts was abandoned for the *ad valorem* tax law were fallacious. The tax on gross earnings was abandoned in Wisconsin at the instance of the tax commissioners, who argued that "the property of the railroad companies should be valued by a state board which should also be empowered to value the property of the state for the levy of the state tax, and be required to assess the general property of the state at the market value."²⁵

Their idea was to bring railway property under the general property tax system and thus secure "equality," the theory of the general property tax system being that justice in taxation is secured by the equal distribution of

²⁵ Report of Wisconsin Tax Commission, 1902, p. 182.

burden among the persons in a country, according to the amount of their property. The system consists in "listing all property according to its value, and the taxation of the proprietor on the basis of that value."²⁶ It assumes that equality of burden and ability to pay are measured by the market value of the property owned.

The central idea of the system is to discover the market value of all the property in the state, and to assess it according to that value. If there was one thing which the thorough investigations in Wisconsin showed, it was the impossibility of appraising all the property within the state.

The omission of such a considerable portion of the property of the state as the quasi serious objections to the methods used by the tax commission in valuing railway property disclosed; the differences in the valuation of the real property; and the absence of sufficient data in the case of personal property, would point to the futility of an attempt to determine the relative burden of taxation borne by the different classes of property in the state by a comparison of the relative rates paid on market value.

A glance at the workings of the system confirms these conclusions. That in practice the system fails utterly is patent to every observer. With a thousand assessors in a single state no one could hope for a uniform basis for determining "market value." With the growth of intangible property, not even the most rigorous laws can discover it. Every treatise on taxation, every report of a state tax commission demonstrates that the general property tax when applied to present industrial conditions fails to distribute the burden equally among the classes, and it fails to distribute it equally within them. Although all admit that it does not secure equality of burden, this does not confound its advocates. The legislators and

²⁶ Adams: *Finance*, p. 362.

commissions cling to the system because of its fundamental idea that justice is secured by the taxation of the individual according to his property. The Wisconsin commission says: "Equality of contribution to the public burden is essential to equality of social and political right. . . . The safety of all interests rests on the principle of uniformity between all classes of property. There must be equality between the classes as well as between the property in the same class."²⁷

Such a program fails to recognize modern industrial conditions, and patent fiscal practices. The trend of the organization of industry has been towards the development of corporations. Legal entities have taken the place of individuals in carrying on the industry of the country. The tendency and necessity have been for segregation and classification rather than aggregation and unification of property. The industrial organization is now so complex that uniformity between classes of property is an indefinite, indefinable, and unattainable "ideal."

What the Wisconsin and Michigan experience shows, what is made evident by the history of taxation in this country is the selection of classes of property for special taxation. Real property has been the bearer in the past, corporations are having especial attention at present, and especially, corporations receiving special privileges from the state. A frank recognition of the true state of affairs would do much to clear away the debris in our tax systems.

The selections having been made, as in the past, according to "social utility,"²⁸ the regulation of rate should not be based upon a comparison where no comparison is pos-

²⁷ Report, 1902, p. 180.

²⁸ For a suggestive paper on the "social utility theory," see the Presidential address of Edwin R. A. Seligman. Publications of the American Economic Association. Third Series, Vol. V, No. 1.

sible, but on the conditions within the industry and on fiscal policy.

Had the Wisconsin commission frankly recognized this principle and said "we believe that the railways are able to contribute more revenue to the state and that it is desirable to levy a heavier rate upon them," the present system, based upon a false premise with its possibilities of political corruption, would not have been substituted for the tax on gross earnings.

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APPENDIX.

TABLE NO. I.
THE CLASSIFICATION IN WISCONSIN.

Railroads of the First Class.

Company	Mileage	Gross earnings per mile.	Percentage of operating expenses to gross earnings.	Taxes percent of gross earnings
Chicago, Milwaukee & St. P.	1,650.46	\$7,707.53	56.05	4
Chicago & Northwestern	1,625.73	7,883.90	62.37	4
C., St. P., Mpls. & Eastern	619.11	6,150.45	76.73	4
Chicago, Burlington & Q.	222.57	5,907.89	61.18	4
C., Lake Shore & Eastern	17.33	4,119.53	64.13	4
Eastern Ry. Co. of Minn.	38.15	13,016.48	43.02	4
Minn., St. P. & S. Ste. Marie	217.42	5,314.44	54.05	4
Northern Pacific	102.92	4,179.32	46.92	4
Wisconsin Central	874.16	5,180.16	59.58	4
		Average, 58.22		
		Mean, 59.58		

Railroads of the Third Class.

Duluth, S. Shore & Atl.	110.60	\$2,407.19	74.51	3
Green Bay & Western	225.00	2,130.04	82.28	3
Kewaunee, Gr. Bay & West.	36.00	2,432.64	51.27	3
Wisconsin & Michigan	40.12	2,176.70	62.00	3

Average, 67.51
Mean, 68.25

Railroads of the Fourth Class.

Milwaukee & Superior	26.16	\$1,878.81	65.00	\$5+2½%
Minnesota & Western	21.00	1,050.88	72.08	\$5+2½%
Washburn, Bayfield & I. R.	64.00	1,728.94	90.38	\$5+2½%

Average, 82.48
Mean, 72.08

¹ Tables include railways in Wisconsin over 15 miles in length doing business in 1899. The statistics are for the calendar year 1899, taken from report of Railroad Commissioner of Wisconsin, 1900. Mileage, gross earnings per mile and per cent. of taxes to gross earnings found on pp. 12, 13, of part two; percentage of operating expenses to earnings, p. 81. There were no roads in the second class for this year.

Railroads of the Fifth Class.^a

Company	Mileage	Gross earnings per mile.	Percent-age of operating expenses to gross earnings	Taxes per mile.
Abbotsford & Northern.....	15.16	\$996.65	69.50	\$5.00
Ahnapee & Western.....	34.00	1,044.30	54.60	5.00
Big Falls Ry. Company.....	21.00	458.51	93.30	5.00
Chicago, Mad. & Northern..	91.31	1,095.73	123.68	5.00
Chippewa Riv. & Menominee	33.00	925.16	74.37	5.00
Drummond & South West'n	27.72	600.71	97.90	5.00
Fairchild & Northeastern...	30.00	1,185.88	50.55	5.00
Hazlehurst & Southeastern..	17.00	1,167.22	72.00	5.00
Kickapoo Valley & Northern (fraction of year).....	51.00	658.00	150.00	5.00
Lake Sup. Ter. & Tr. Ry. Co.	15.00	708.28	79.90	5.00
Marshfield & Southern.....	33.00	1,190.63	50.90	5.00
Marinette, Tom. & Western..	33.30	1,269.13	86.18	5.00
Minn., St. P. & Ashland....	35.50	731.94	54.05	5.00
		Average, 81.14		
		Mean, 74.37		

TABLE NO. II.^a

RATIO OF OPERATING EXPENSES TO GROSS EARNINGS.

According to Gross Earnings per Mile in Several States.

Per Cent. of Operating Expenses to Gross Earnings.

Gross Earnings per mile.	Minnesota	Missouri	Michigan
\$1,000.....	106	84	27
		67	58
		275	81
			87
			61
			73
			101
			100
			59
			38
			101

^a The Glenwood and Northeastern (15 miles) reported operating expenses \$12, 719.98, total gross receipts \$185. Being abnormal, it was omitted. The Matton Railway Company, 21 miles, and Holmes Brothers' Railway, 27 miles, both evidently logging roads, made very incomplete reports and could not be included. Several roads of the

Gross Earnings per mile. \$2,000.	Minnesota	Missouri	Michigan
	58	97	84
	57.8	90	66
	139	81	57
	100	57	82
	126	121	65
		76	74
			74
			66
			85
			66
3,000.	56	79	105
	62		69
	86		69
			112
			63
			74
			74
			31
			74
			69
			72
			74
			78
4,000.	71	81	74
	87		74
5,000.			75
			75
			79
			66
6,000.	55.8	62	75
	56	65	
	71	72	
		75	
		71	
7,000.	52	61	
		64	
		70	
8,000.	89	60	66
	54.9		54
	51		
9,000.	79	80	73
	43.8	79	86
10,000.	45.9	60	74
	43.8	65	74
	47		
20,000.	67		
	49		
40,000.	63.9		

fifth class did not give the percentage of operating expenses to gross earnings, and it was computed from pp. 12, 13, 17 of the report.

⁸ Compiled from Report Minnesota Railroad and Warehouse Commission, 1904, pp. 110-113.

TABLE NO. III.

MICHIGAN RAILROAD APPRAISAL.

	Mileage	Gross earnings per mile	Cooley valuation per mile	Adams valuation per mile
Michigan Central	221	\$19,285	\$93,081	\$41,359
Tol. C. S'n & Det.....	47	15,570	55,500	101,802
			\$18,424	\$71,630
Detroit & Luna Northern	17	\$9,760	\$18,867	
Chicago & Grand Trunk.	224	9,628	32,019	12,849
			\$9,694	\$6,424.5
Det., Monroe & Toledo..	54	\$8,446	\$49,730	\$18,345
Mineral Range	17	8,227	22,989	7,635
			\$8,336.5	\$12,290
Det., Gr. H. & Milw.....	189	\$5,514	\$37,733	
Hancock & Calumet.....	31	\$5,299	\$35,249	\$20,857
Lake Sh. & Mich. S'n....	187	\$5,288	\$23,283	\$18,112
Wabash	75	5,283	37,082	1,391
			\$5,446	\$10,090
Grand Rap. & Ind.....	357	\$4,718	\$25,665	\$2,168
Det. & Bay Cy. (M. C.)	138	4,689	20,498	
C., C., C. & St. L.....	35	4,231	27,419	
			\$4,549	\$25,194
				722
Minn., St. P. & S. Ste. M.	100	3,905	23,886	
Ann Arbor	286	3,805	25,567	1,162
C. D. & C. G. T. Junction.	59	3,724	49,895	
Chicago & Northwestern..	521	3,514	30,390	4,115
D. G. R. & Western.....	380	3,505	20,127	699
Jackson, Lansing & S....	322	3,483	32,641	
Manistee & Northwestern.	69	3,452	16,160	6,664
Grand River Valley.....	83	3,421	23,061	
Dul., S. Shore & Atl.....	429	3,379	26,222	8,515
Flint & Pere Marquette...	710	3,356	24,002	410
Musk., G. R. & Ind.....	36	3,260	16,157	3,282
Chicago & Great Western.	454	3,146	20,673	
			\$3,495	\$24,981
				\$2,060
Michigan Air Line.....	109	\$2,788	\$26,259	\$3,153
Ka. & White Pigeon.....	36	2,516	19,585	3,094
Kal., Al. & G. R.....	58			
Cinn., Sag. & Mack.....	53	2,396	25,694	
			\$2,566	\$23,846
				\$20,821

TABLE NO. VI.*

RAILWAY OPERATIONS IN THE UNITED STATES.

	1904	1903	1902	1901	1900	1899
Gross earnings from operation	\$9,306	\$9,258	\$8,625	\$8,123	\$7,722	\$7,000
Less operat'g expenses	6,308	6,125	5,577	5,269	4,993	4,570
Income from operation	\$2,998	\$3,133	\$3,048	\$2,854	\$2,729	\$2,435
Income from other sources	1,003	1,002	981	919	846	793
Total income	\$4,001	\$4,133	\$4,029	\$3,773	\$3,575	\$3,228
Total deductions	2,688	2,692	2,629	2,338	2,395	2,353
Net Income	\$1,313	\$1,443	\$1,400	\$1,235	\$1,180	\$875
Payments from income	1,046	960	926	802	725	592
Surplus from operation	\$267	\$483	\$474	\$433	\$455	\$283

TABLE NO. VII.*

RAILWAY EARNINGS IN THE NORTH CENTRAL STATES.

Year	Gross Earnings per mile.	Net Earnings per mile.	Per cent Operating Expenses to Gr. Ear.	Interest paid on Bonded Debt.	Dividends paid.
1896.....	\$5,999	\$1,806	69.89	4.73	2.22
1897.....	5,900	1,811	69.31	4.52	2.21
1898.....	6,408	1,955	69.49	4.53	2.52
1899.....	6,935	1,169	68.72	4.50	2.77
1900.....	7,628	2,323	69.51	4.41	3.18
1901.....	7,913	2,325	70.62	4.32	3.31
1902.....	8,336	2,507	69.92	4.41	3.53
1903.....	8,837	2,571	70.81	4.22	3.05

TABLE NO. VIII.*

PER CENT. OF OPERATING EXPENSES TO GROSS EARNINGS.

All Railways in the United States.

Group	1904	1903	1902	1901	1900	1899
I.....	73.35	73.17	71.07	69.98	69.49	68.88
II.....	67.26	66.07	64.98	64.90	64.40	65.31
III.....	74.52	71.58	69.49	67.47	69.22	70.53
IV.....	64.01	63.15	60.66	62.35	62.79	64.27
V.....	70.66	69.88	68.94	68.27	67.99	67.95
VI.....	65.90	62.72	61.48	63.00	61.91	61.18
VII.....	56.84	57.03	56.59	60.42	58.05	56.34
VIII.....	67.11	64.00	62.01	61.83	63.71	65.54
IX.....	75.06	78.41	74.00	68.18	73.63	70.02
X.....	57.67	56.86	56.72	57.41	55.82	61.48
	67.79	66.16	64.66	64.86	64.65	65.34

* Statistics of Railways in the United States, 1904, p. 80.

* Poor's Manual, 1904, p. XIV.

* Statistics of Railways, 1904.

Proposed Bill relating to license fees for the operation of railroads in this state, to amend sections 1211, 1212, 1213 and 1214 of the statutes of 1898, and to add sections 1213a, 1213b and 1213c.

The people of the State of Wisconsin, represented in senate and assembly, do enact as follows:

Section 1. Section 1211 of the statutes of 1898 is hereby amended to read as follows:

Section 1211. Every person, association, company or corporation operating a railroad in this state, except street railways, shall, on or before the 10th day of February in each year make and return to the State Treasurer in such forms and upon such blanks as shall be furnished by him, a true statement of the gross earnings of their respective railroads for the preceding calendar year, including the proportionate part of the gross earnings from interstate traffic and business earned within the state as provided in section 1213, of the number of miles of railroad operated by each person, association, company or corporation, and the gross earnings per mile during such year, which statement shall be verified by the oath of such person or of the president or other chief officer and the secretary, auditor or treasurer of such association, company or corporation so operating such railroad. A duplicate of such statement shall at the same time be returned by the company to the commissioner of taxation.

Section 2. Section 1212 of the statutes of 1898 is hereby amended to read as follows:

Section 1212. Each such person, association, company and each corporation shall, on returning such statement apply for a license to operate and to exercise the franchises of such railroad mentioned in such statement, and shall pay the license fee therefor, as provided in section 1213, and if such statement is approved by the railroad

commissioner upon the payment of the first installment of said license fee as provided in section 1213, shall receive from the state treasurer a license to operate such railroad for the calendar year commencing on the first day of January preceding and terminating on the next succeeding thirty-first day of December, unless sooner revoked; provided, however, unless such statement is approved by the commissioner of taxation, and his certificate of approval thereof is filed with the state treasurer, the payment of the license fee on the gross earnings reported by the railroad and the issuance of a license by the state treasurer shall not affect or be a waiver of the right of the state to ascertain, demand and receive such further sum as license fees on gross earnings as shall be found due and remain unpaid.

Section 3. Section 1213 of the statutes of 1898 is hereby amended to read as follows:

Section 1213. The annual license fee for the operation of such railroads within the state shall not be less than three per cent., nor exceed five and one-half per cent., of their annual gross earnings, and shall be graduated according to gross earnings per annum per mile of operated railroad as follows:

For all railroads whose gross earnings per mile shall not exceed two thousand dollars the license fee shall be three per cent. of such gross earnings; for all railroads whose gross earnings shall exceed two thousand dollars per mile, the license fee shall be three per cent. of such gross earnings and in addition thereto one-tenth of one per cent. for each one hundred dollars or fraction thereof of gross earnings per mile in excess of two thousand dollars, as shown in the following schedule:

Gross earnings per mile.	Rate of license fee
\$2000 or less.....	3 per cent.
Over \$2000 and not over \$2100.....	3.1 per cent.
Over \$2100 and not over \$2200.....	3.2 per cent.
Over \$2200 and not over \$2300.....	3.3 per cent.
Over \$2300 and not over \$2400.....	3.4 per cent.
Over \$2400 and not over \$2500.....	3.5 per cent.
Over \$2500 and not over \$2600.....	3.6 per cent.
Over \$2600 and not over \$2700.....	3.7 per cent.
Over \$2700 and not over \$2800.....	3.8 per cent.
Over \$2800 and not over \$2900.....	3.9 per cent.
Over \$2900 and not over \$3000.....	4 per cent.
Over \$3000 and not over \$3100.....	4.1 per cent.
Over \$3100 and not over \$3200.....	4.2 per cent.
Over \$3200 and not over \$3300.....	4.3 per cent.
Over \$3300 and not over \$3400.....	4.4 per cent.
Over \$3400 and not over \$3500.....	4.5 per cent.
Over \$3500 and not over \$3600.....	4.6 per cent.
Over \$3600 and not over \$3700.....	4.7 per cent.
Over \$3700 and not over \$3800.....	4.8 per cent.
Over \$3800 and not over \$3900.....	4.9 per cent.
Over \$3900 and not over \$4000.....	5 per cent.
Over \$4000 and not over \$4100.....	5.1 per cent.
Over \$4100 and not over \$4200.....	5.2 per cent.
Over \$4200 and not over \$4300.....	5.3 per cent.
Over \$4300 and not over \$4400.....	5.4 per cent.
Over \$4400	5.5 per cent.

The gross earnings upon which the license fee aforesaid shall be computed and paid shall include the whole of the gross earnings from traffic business beginning and ending in this state, together with such proportion of the whole of every toll, rate, fare, charge, credit or receipt paid for, or on account of traffic or business through this state or partly within and partly without this state as the mileage within this state shall bear to the whole mileage for which each such separate toll, rate, fare, charge, credit or receipt was made or shall have accrued.

One-half of the license fee shall be paid at the time the license so issues and one-half on or before the tenth day of August in each year.

Such license shall be in lieu of all other taxes upon the franchises and all other property of the railroad necessarily used in the operation of such railroads in this state.

Section 4. If at the time this act shall go into effect any license shall have been issued to any person, associa-

tion, company or corporation to operate a railroad in this state subject to pay a license fee under this act for the year ending on the thirty-first day of December, 1901, for a less license fee than is provided in this act, such license shall thereupon become void, unless such person, association, company or corporation, shall, on or before the tenth day of August in the year 1901, pay the increase of the license fee imposed upon such person, association, company or corporation by this act for that portion of the year covered by such license remaining after this act shall go into effect; the license fee to be paid for such unexpired year to bear the same proportion to the amount of the annual license fee to be paid by the terms of this act by such person, association, company or corporation as such unexpired term bears to one year.

Section 5. Chapter 51 of the statutes of 1898 is hereby further amended by adding after section 1213 three new sections to be designated as sections 1213a, 1213b, 1213c, as follows:

Section 1213a. In case the statement of gross earnings of any railroad shall not be approved by the commissioner of taxation as provided in section 1212, the commissioner of taxation and the first and second commissioners of taxation, who are hereby constituted a board therefor, shall ascertain and determine the amount of the gross earnings of such railroad and compute the amount of license fee to be paid thereon. The proceedings for such determination shall be commenced by such board within sixty days after such statement of gross earnings shall have been filed with the state treasurer and the commissioner of taxation. At or before the commencement of such proceeding the said board shall, by registered letter, give notice to the person, association, company or corporation making such statement of gross earnings, that such statement is not approved, that said board will

ascertain and determine the amount of such gross earnings and of the license fee to be paid thereon pursuant to these statutes, and shall in such notice, or in a later notice before such determination shall be accomplished, fix a time and place at which said person, association, company or corporation may be heard and present evidence in relation thereto. For the purpose of making such determination said board shall have authority to examine the records, books and accounts of the person, association, company or corporation making such statement and may employ experts to aid in such examination, and such person, association, company or corporation shall furnish such further statement or information as said board shall require in any way relating to or affecting such earnings. Said board shall have authority to summon and examine witnesses and cause the production of books and papers and may obtain and procure such other evidence or information as said board shall deem pertinent to such inquiry. The said board shall consider all the reports, books, accounts, evidence and other information, obtained, and shall, according to their best knowledge and judgment, ascertain and determine the gross earnings of such person, association, company or corporation within the state and the license fee which shall be paid thereon. Such determination when made shall be entered upon the records of said board and same shall be presumed to be correct and true and shall be taken as *prima facie* evidence of the amount of such gross earnings and of the license fee due thereon in every action and proceeding in which the same may be drawn in question.

Section 1213b. Such determination shall be certified to the state treasurer who shall thereupon by registered letter give notice thereof and of the amount of gross earnings and license fee so determined to the person, association, company or corporation operating such rail-

raod. If the amount of the license fee so determined shall be greater than the amount shown to be due by the report of the earnings of such railroad filed with the state treasurer under the provisions of sections 1211, the person, association, company or corporation operating such railroad shall make payment of one-half of the amount of such increase within thirty days after notice of such determination, and the other one-half at the time provided by law for the payment of the second installment of such license fee or within thirty days after such notice if the time for payment of such second installment shall have expired or shall expire within said thirty days.

Section 1213c. Any person, association, company or corporation claiming to be aggrieved by such determination, may, within six months after payment of the final installment of the license fee thereby imposed but not thereafter, bring an action against the state in the circuit court for Dane County to recover such sum, if any, as shall be alleged and proved to be included in such fee and payment in excess of the true amount which should have been imposed. The state may be served with a summons in such action by delivering a copy to the attorney-general or leaving it at his office with one of his assistants. The attorney-general shall defend such actions and shall render such assistance as such board may require in the proceedings to determine the gross earnings of any railroad.

Section 6. Section 1214 of the statutes of 1898 is hereby amended to read as follows:

Section 1214. If any person, association, company or corporation operating any railroad in this state shall neglect to obtain such license or pay the license fee therefor, or any part thereof, as hereinbefore provided, such person, association, company or corporation shall absolutely forfeit to the state a sum equal to ten per cent. of

the license fee neglected to be paid, to be recovered in an action brought in the name of the state; and such neglect shall also be a cause of forfeiture of all the rights, privileges and franchises, whether granted by special charter or obtained under general laws by or under which any such railroad is operated. And the attorney-general, upon such neglect, shall collect by action the pecuniary forfeiture herein imposed and also proceed to have forfeiture of such rights, privileges and franchises duly declared. If any license shall have been issued prior to such default in payment the same shall be revoked by the state treasurer whenever such default shall occur. Any such person, association, company or corporation at any time before the final judgment of forfeiture of such rights, privileges and franchises is rendered may be permitted to make the return and pay such license fee upon special application to the court in which the action to declare such forfeiture is pending, upon such terms as the court shall direct.

Section 7. This act shall take effect and be in force from and after its passage and publication." ⁷

⁷ Senate Bill Number 94, proposed by Tax Commission, January 30th, 1901.

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